

# TCM-5000EV

## SERVICE MANUAL

*US Model  
Canadian Model  
AEP Model  
UK Model  
E Model*



### SPECIFICATIONS

**Recording system**

2-track 1-channel monaural

**Speaker**

Approx. 9.2 cm (3 5/8 inches) dia.

**Fast winding time**

Approx. 2 min. with Sony C-60 cassette

**Playback speed**

-20% adjustable

+40

**Frequency response**

90-9,000 Hz

VOR recording: 300-5,000 Hz

**Inputs**Microphone input (minijack)  
sensitivity 0.2 mV (-72 dB) for low impedance microphoneMixing microphone input (minijack)  
sensitivity 0.44 mV (-65 dB) for low impedance microphoneLine input (minijack)  
sensitivity 0.06 V (-22 dB)  
input impedance 100 kilohms**Output**Earphone (minijack)  
for 8 to 300 ohm earphone or load impedance 10 kilohms or higher**Other jack**Remote control jack  
700 mW (at 10% harmonic distortion)**Power requirements**

6V dc

4 batteries size C (IEC designation R14)

or optional Sony BP-16H rechargeable battery pack

DC IN 6V jack accepts:

optional Sony AC-61 ac power adaptor (in the USA) or optional AC-12 ac power adaptor (in Canada) for use on 120V ac, 60 Hz (US, Canadian Model)

optional Sony AC-122 ac power adaptor (available in the United Kingdom and European countries) for use on 110, 127, 220 or 240 V ac, 50 Hz (AEP, UK, E Model)

optional Sony AC-122 ac power adaptor (available in other countries) for use on 110, 120, 220 or 240 V ac, 50/60 Hz (AEP, UK, E Model)

optional Sony DCC-127A car battery cord for use on 12V car battery  
optional Sony DCC-240 car battery cord for use on 24V car battery

**Battery life (US, Canadian Model)**

Batteries	Recording	Playback
Sony SUM-2(NS) New Super or Eveready Heavy Duty No. 1235 batteries	Approx. 8 hours	Approx. 7 hours
Eveready No. E93 alkaline batteries	Approx. 20 hours	Approx. 20 hours

**Battery life (AEP, UK, E Model)**

Batteries	Recording	Playback
Sony SUM-2(NS) New Super batteries	Approx. 8 hours	Approx. 7 hours
Sony Eveready AM2 alkaline batteries	Approx. 20 hours	Approx. 20 hours

**Dimensions** Approx. 270.8×58.4×154 mm (w/h/d)

(10 3/4×2 3/8×6 1/8 inches)  
incl. projecting parts and controls

**Weight** Approx. 1.45 kg (3 lb 4 oz)  
incl. batteries

**CASSETTE CORDER****SONY**®

使用説明書は本取扱説明書も参照のこと  
Refer to the additional documents.

**TC**

## LOCATION AND FUNCTION OF CONTROLS

**① PEA (pre-end alarm) indicator**

Flickers a few minutes before the end of the tape during recording.

**② ▼ LOCK (eject lock) lever**

To lock the cassette compartment lid.

**③ ▲ EJECT button****④ Tape operation mode select buttons****◀◀ REVIEW/REW (rewind) button****■ STOP button****▶ PLAY button****▶▶ CUE/FF (fast forward) button****● RECORD button****II PAUSE button****⑤ Tape counter and RESET button**

To set the counter "000", press the RESET button.

**⑥ SPEED CONTROL**

Adjusts the playback speed.

**⑦ TONE control**

Adjusts the playback tone quality. Turn to HIGH for more treble, or LOW for less treble.

**⑧ MONITOR selector**

Selects the sound to be monitored through the earphone during recording.

**⑨ REC MODE (recording mode) selector**

Selects automatic recording (AUTO), Sony voice-operated recording (VOR) or manual recording (MANUAL).

**⑩ REC/PB VOLUME/VOR SENS (recording level/playback volume/VOR sensitivity) control**

Adjusts the recording level of the built-in microphone, MIC ① jack or LINE IN jack with the REC MODE selector set to MANUAL; playback volume; or the recording level to activate the VOR recording with the REC MODE selector set to VOR.

**⑪ MIC ② LEVEL control**

Adjusts the recording level of the microphone connected to the MIC ② jack.

**⑫ LEVEL/BATT (level/battery) meter**

Indicates recording level during recording, playback level during playback, and shows battery condition when the BATT CHECK/LIGHT button is depressed while the set is operating.

**⑬ MIC (built-in microphone)****⑭ BATT CHECK/LIGHT (battery check/memory light) button**

While this button is depressed with the set in operation, the meter shows the battery condition. The meter will be illuminated for about 10 seconds when this button is once pressed.

**⑮ REMOTE control jack**

Accepts an optional remote control, foot switch or the thinner pin of a 2-pin plug microphone with remote tape stop/start facility.

**⑯ MIC ① jack**

Connect an optional external microphone.

**⑰ VOR (voice-operated recording) indicator**

Lights up when the tape is being recorded in VOR recording.

**⑱ EARPHONE jack**

Used for recording from another tape recorder, etc.

**⑲ LINE IN jack (minijack)**

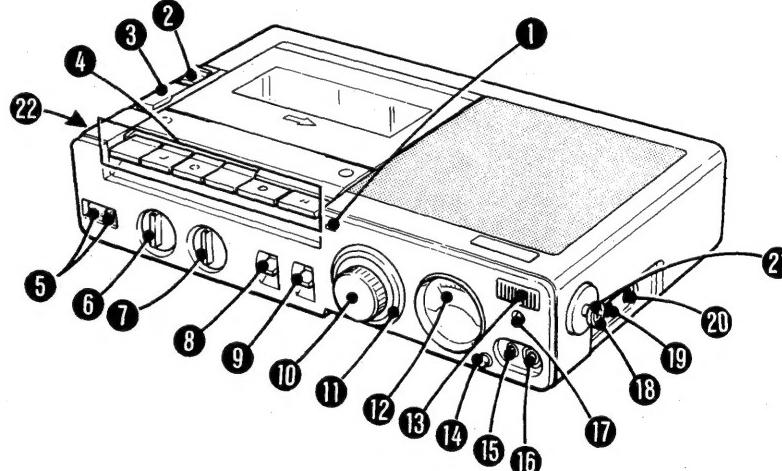
Used for recording from another tape recorder, etc.

**⑳ MIC ② jack**

Connect an external microphone for mixing.

**㉑ Projection for shoulder strap**

To attach the supplied shoulder strap, see back cover.

**㉒ DC IN 6V jack (left side)**

## FEATURES

- Sony voice-operated recording system using the BBD (Bucket Brigade Device) IC starts and stops recording automatically according to your preset level.
- Three-head system which enables you to monitor the recorded sound while actual recording.
- Pre-end alarm system to warn you when the tape is about to run out.
- Auxiliary microphone jack for record mixing.
- Playback speed control plus cue and review functions to quickly catch and write down the tape contents.
- Eject lock mechanism prevents accidental opening of the cassette compartment lid.
- Four different power sources: batteries, house current, rechargeable battery, and car battery.

**Sony voice-operated recording system**

In Sony voice-operated recording system, the tape runs only when the sounds higher than a set level are picked up and stops automatically if the level of the sounds become lower than the set level. The VOR indicator lights when recording is being made.

Once you have started the recording with the REC MODE selector set to VOR, you need not press the ■ STOP or II PAUSE button when there is no sound. In addition, you can listen to the tape recorded with this system smoothly, as it does not have long blank spaces.

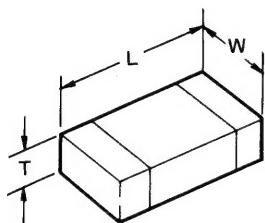
The BBD (Bucket Brigade Device) IC used in this recorder ensures recording without cutting off the starting point.

**Chip components**

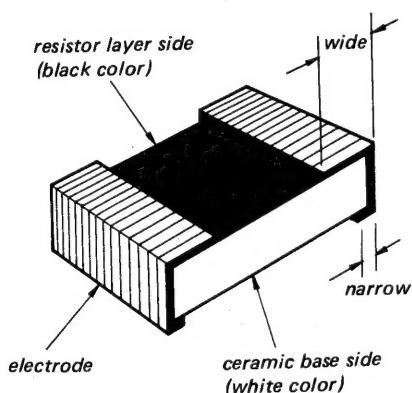
Chip components include resistors, capacitors, transistors, diodes, coil and adjustable resistors.

In this section, the types of resistors, ceramic capacitors, transistors and diodes which are used most frequently will be described.

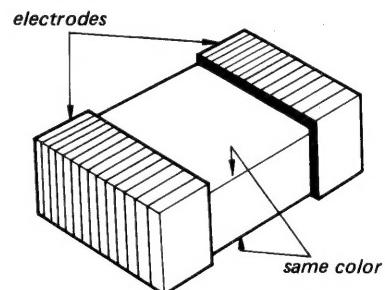
Dimension of transistors and capacitors



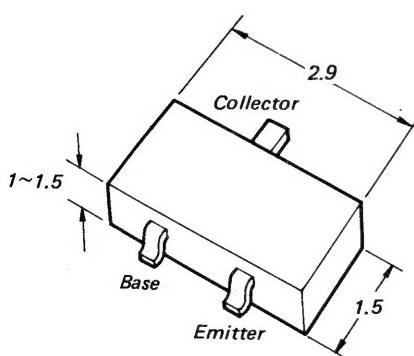
(Unit: mm)			
Type	L	W	T
3216	3.2	1.6	0.45 ~ 0.6
2125	2.0	1.25	0.35 ~ 0.5

**Identification**

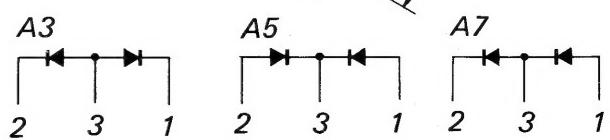
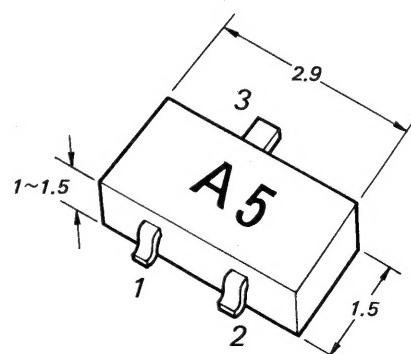
Resistor



Laminated Ceramic Capacitor



Transistor



Diode

### Replacing chip components

All chip components should be connected and disconnected, using a tapered soldering iron [temperature of the iron tip: less than 280°C (536°F)], a pair of tweezers and braided wire.

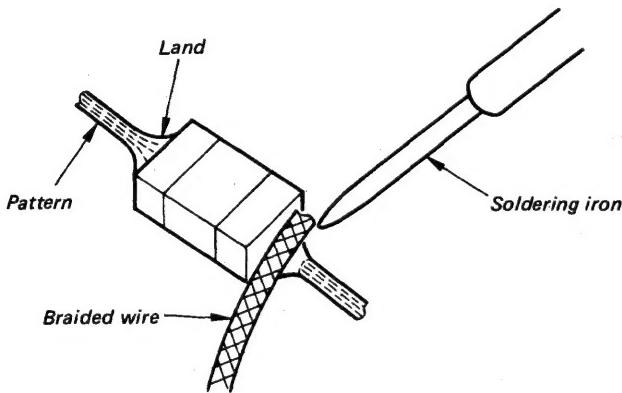
### Precautions for replacement

1. Do not disconnect the chip component forcefully.  
Otherwise, the pattern may peel off.
2. Never re-use a disconnected chip component. Dispose of all old chip components.
3. To protect the chip component, heating time for attaching the component should be within 3 seconds.

### ○ Removing chip components

#### (1) Removing solder at electrode

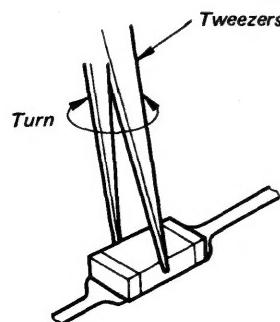
Remove the solder at the electrode, using a thin braided wire. Do not remove the solder of the part (chip component) attached adjacent to the electrode.



#### (2) Disconnecting chip components

Turn the tweezers with the soldering iron alternately applied to both electrodes, and the chip component will be disconnected. Take careful precautions while disconnecting, because if the chip component is forcefully removed the land may peel off.

Never re-use a disconnected chip component.



### (3) Smoothing the soldered surface

After disconnecting the chip component, remove the solder by using a braided wire to smooth the land surface.

### ○ Connecting chip components

The value of chip components is not displayed on the main body. Take due precautions to avoid mixing new chip components with other ones.

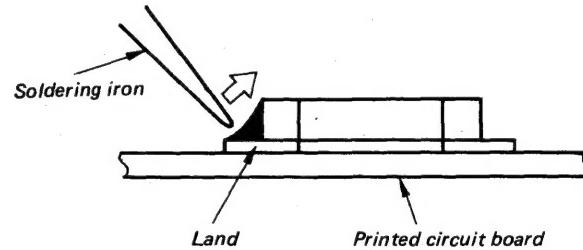
#### (1) Applying solder to land on one side

Apply a thin layer of solder to the land on one side where the chip component is to be connected. Too much solder may cause bridging.



#### (2) Speedy soldering

Hold the chip component at the desired position, using tweezers, and apply the soldering iron in the arrow-marked direction. To protect the chip component, heating time should be within 3 seconds.



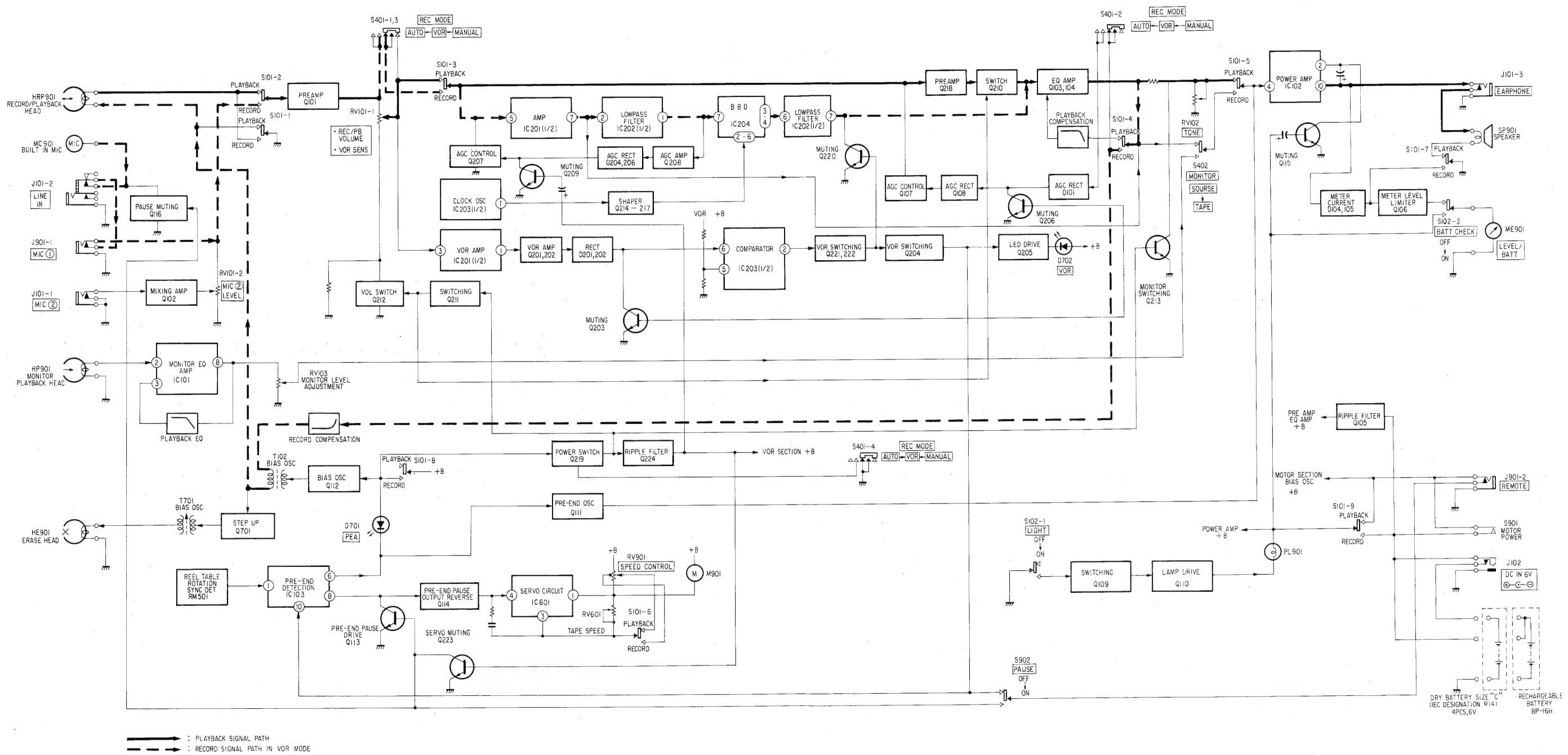
#### (3) Speedy soldering of electrode on the other side

Solder the electrode on the other side in the same way as in (2) above.

## **SECTION 1**

### **OUTLINE**

## 1-1. BLOCK DIAGRAM

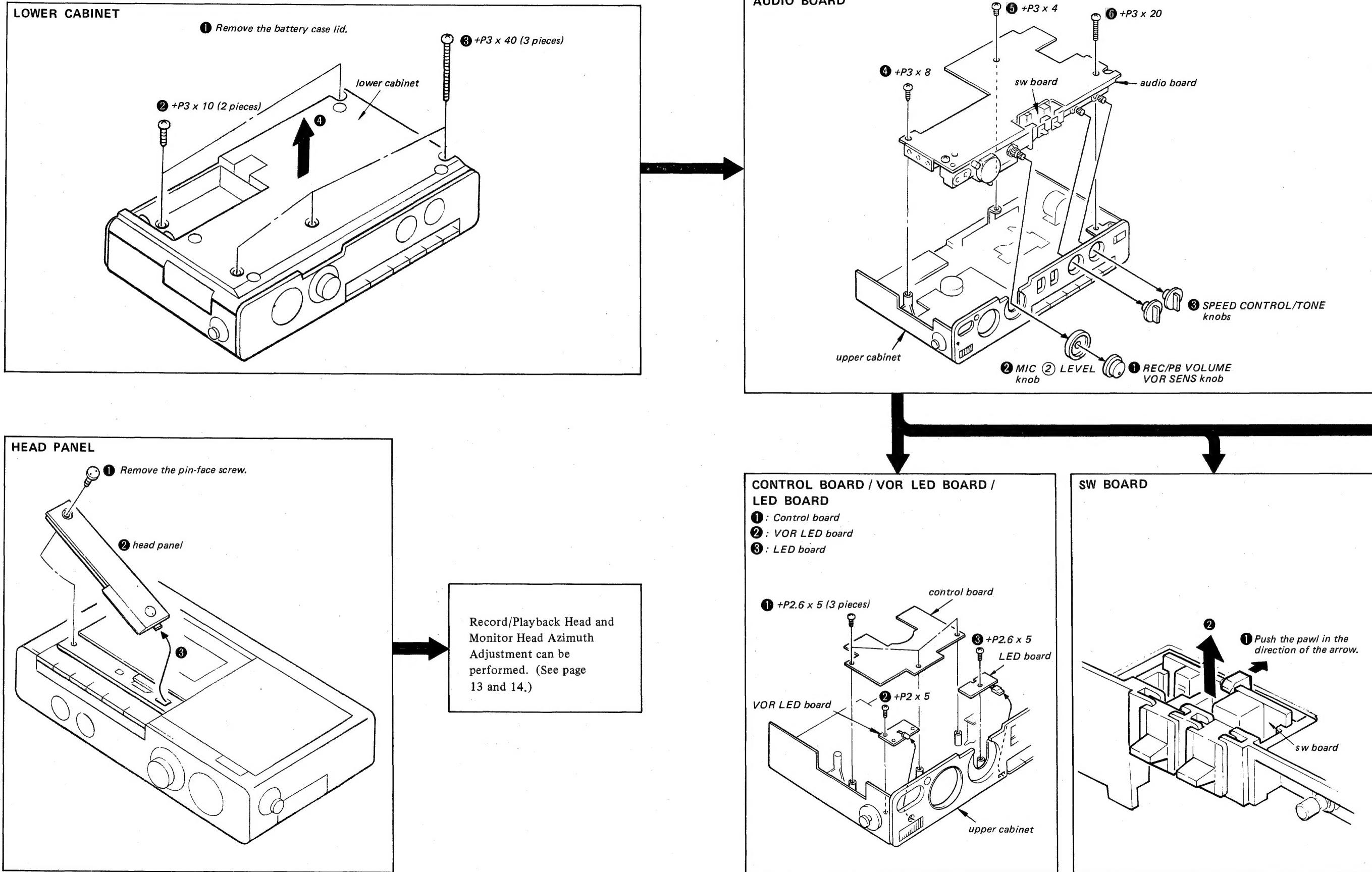


—→ : PLAYBACK SIGNAL PATH  
- - - → : RECORD SIGNAL PATH IN VOR MODE

## SECTION 2

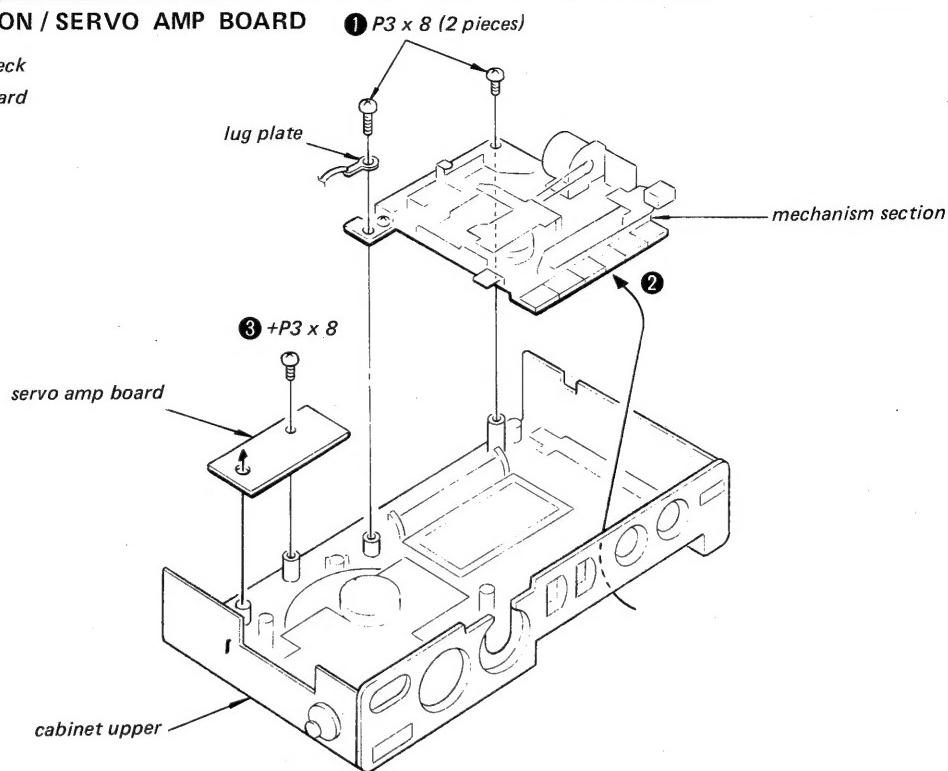
### DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.



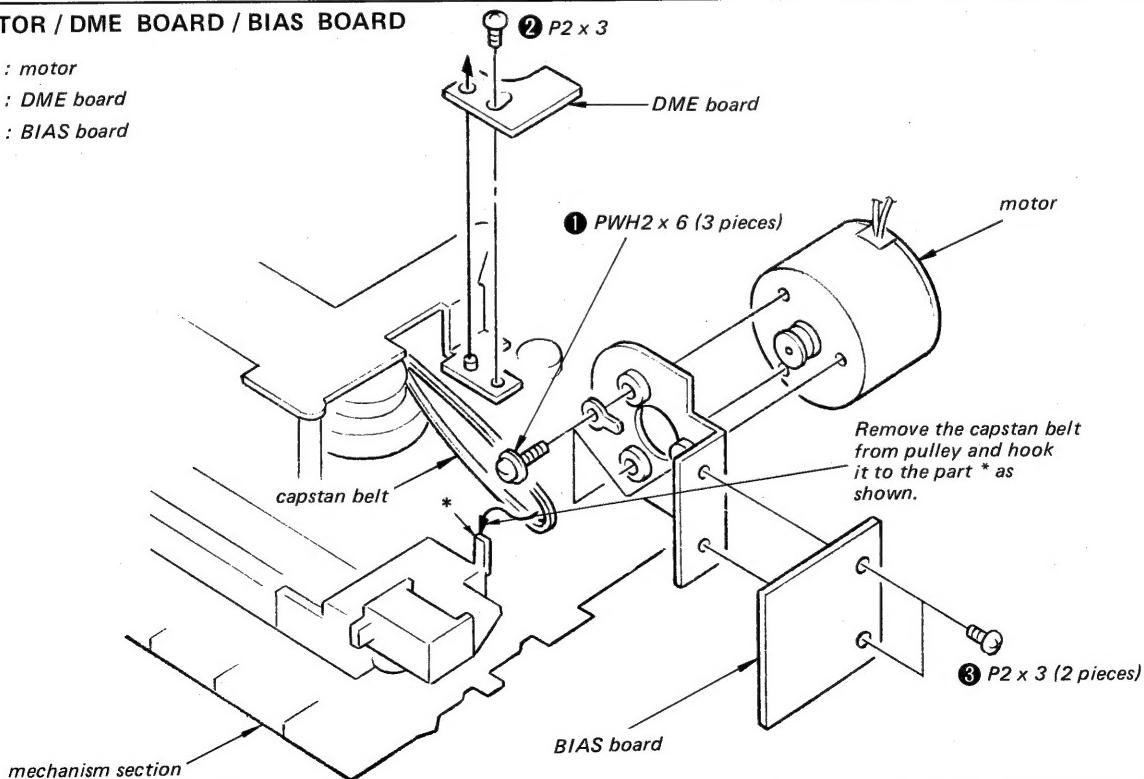
## MECHANISM SECTION / SERVO AMP BOARD

- ①, ② : mechanism deck  
 ③ : servo amp board



## MOTOR / DME BOARD / BIAS BOARD

- ① : motor  
 ② : DME board  
 ③ : BIAS board



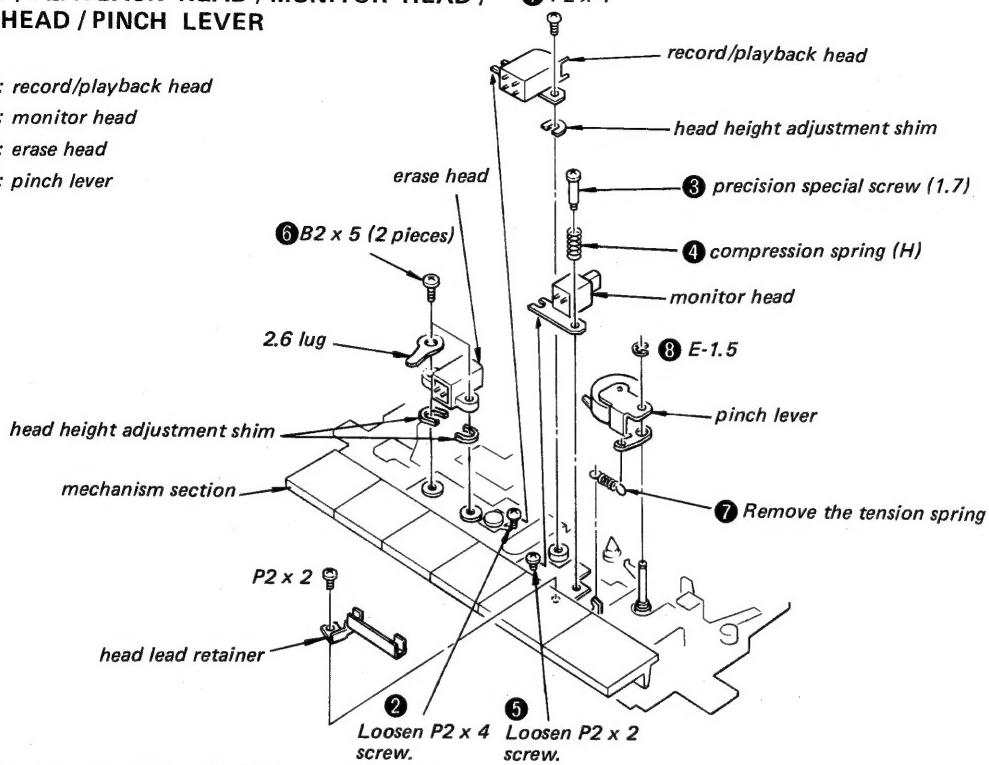
## RECORD / PLAYBACK HEAD / MONITOR HEAD / ERASE HEAD / PINCH LEVER

①, ② : record/playback head

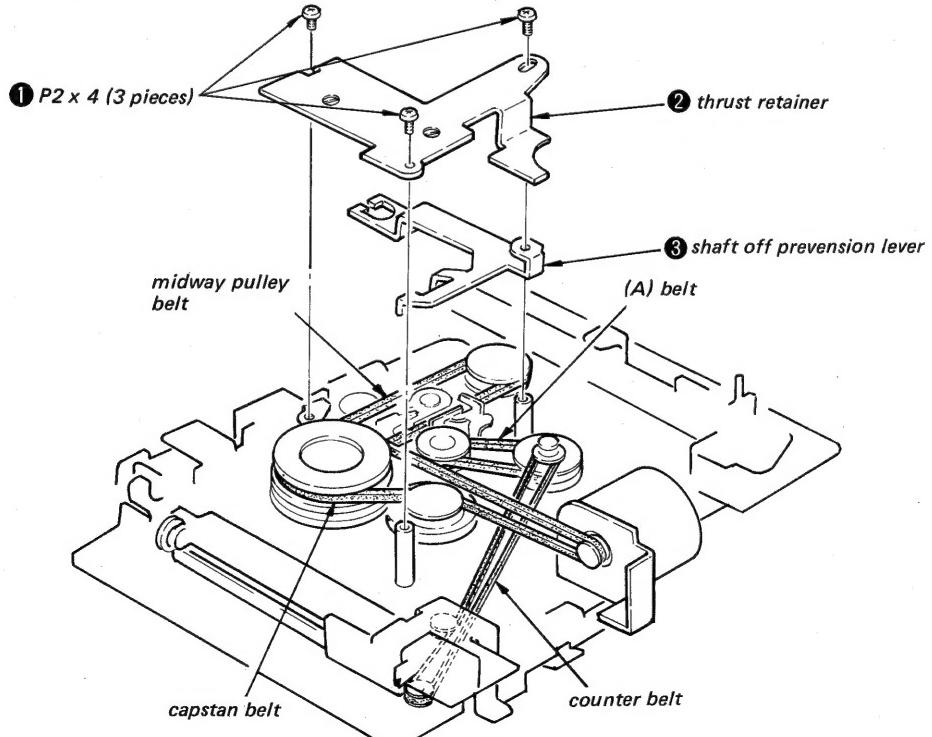
③ - ⑤ : monitor head

⑥ : erase head

⑦, ⑧ : pinch lever



## BELTS REPLACEMENT



## SECTION 3

### ADJUSTMENTS

#### 3-1. MECHANICAL ADJUSTMENTS

##### PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
 

record/playback head	pinch roller
erase head	rubber belts
monitor head	idle
capstan	
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

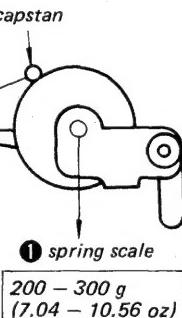
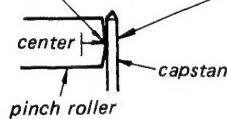
##### Torque Measurement

Torque	Meter Reading	Torque Meter (Cassette-type)
FWD torque	25 – 45 g·cm (0.35 – 0.63 oz-inch)	CQ-102B
FF-REW torque	more than 70 g·cm (more than 0.97 oz-inch)	CQ-201B
FWD back tension	5 g·cm	CQ-102B
tape tension	more than 100 g (more than 3.52 oz)	CQ-403A

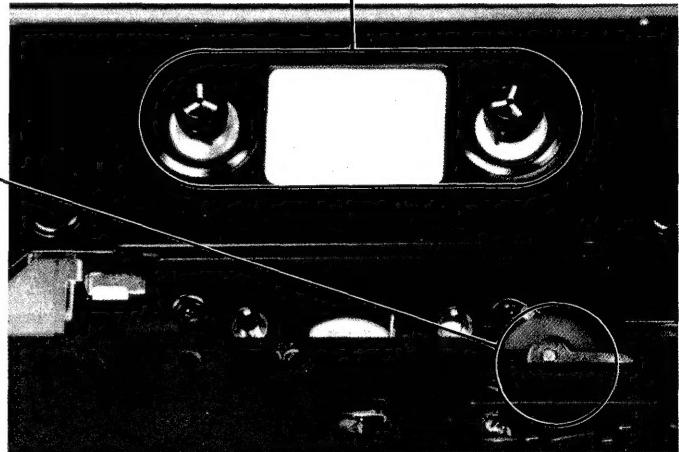
##### Pinch Roller Pressure Adjustment

###### — Playback Mode —

- ② Slowly return the pinch roller and read the spring scale just when the pinch roller starts rotating. (The capstan should first contacts here.)

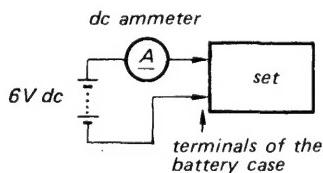


① spring scale  
200 – 300 g  
(7.04 – 10.56 oz)

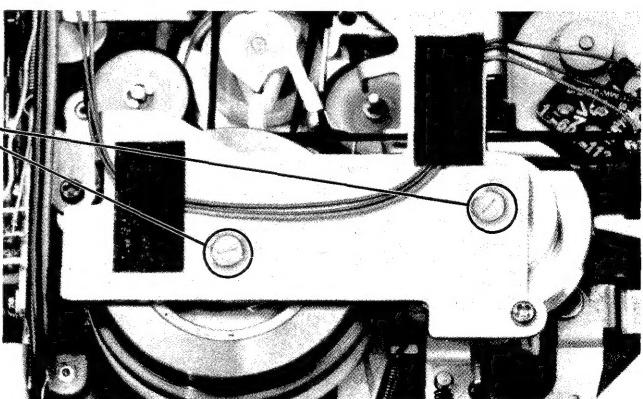


##### Flywheel (A, B) Thrust Play Adjustment

###### — Playback Mode —



1. Turn the thrust screw counterclockwise until the screw tip leaves from the flywheel shaft.
2. Gradually turn the thrust screw clockwise to the position where the motor current suddenly increases.
3. Then, turn the thrust screw counterclockwise about  $\frac{1}{4}$  turn from the position obtained in step 2.



**Pause Timing Adjustment****- Playback Mode -**

When PAUSE is locked:

The clearance between the pinch roller and capstan should be 0.5 – 1 mm just when the pinch roller is detached from the capstan and the take-up reel spindle stops rotating.

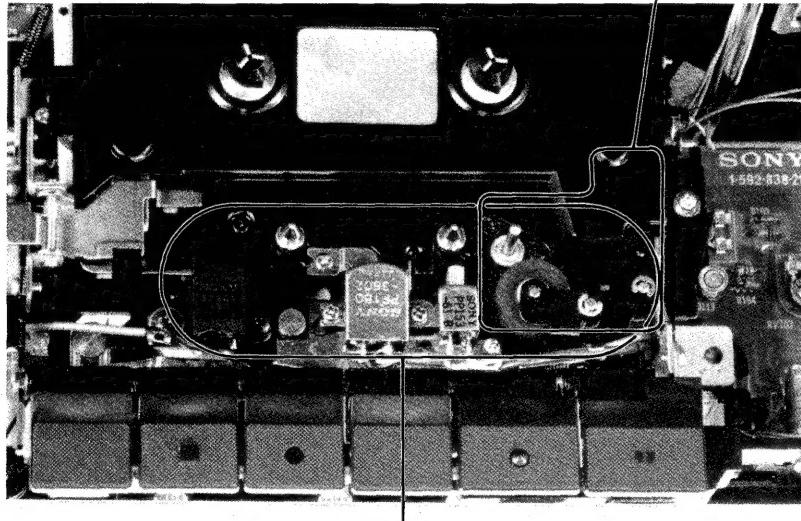
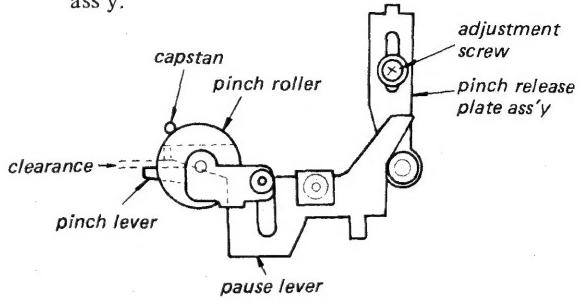
When PAUSE is released:

The pinch roller should start rotating after the take-up reel spindle starts rotating.

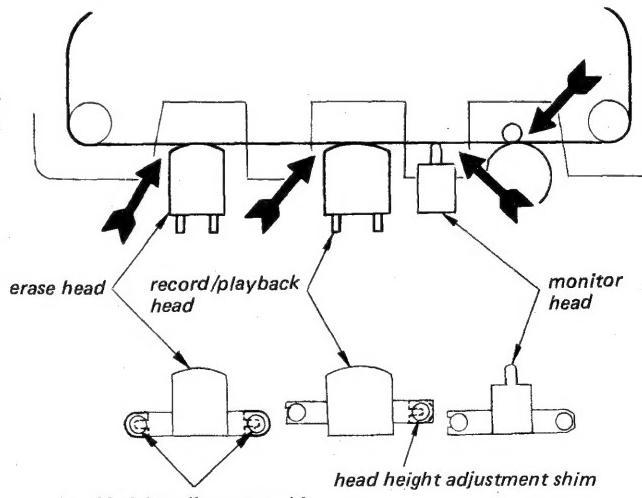
The clearance shown below should be obtained.

**Procedure:**

Change the position of the pinch release plate ass'y.

**TAPE PATH ADJUSTMENT**

1. Use mirror cassette (CQ-009C).
2. In playback mode and viewing from the front, adjust the head heights to eliminate tape curl and tape twist at portions of arrows.



**Head height adjustment shim**

**Part No. t**

Part No.	t
3-513-237-01	0.1
3-513-237-11	0.2

### 3-2. ELECTRICAL ADJUSTMENTS

**Note:** The adjustment should be performed in the order given in this service manual.

- Standard Record:

Deliver the standard input signal level to the input jack and set the REC/PB VOLUME/VOR SENS control to obtain the standard output signal level.

#### Standard Input Level

	MIC ①
source impedance	600 Ω
input level	0.77 mV (-60 dB)
input frequency	333 Hz

#### Standard Output level

	EARPHONE
load impedance	10 kΩ
output level	0.62 (-2 dB)

#### Tape Speed Adjustment

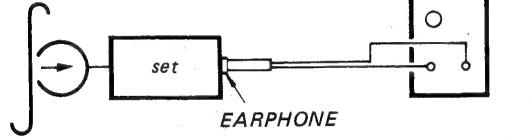
##### Setting:

REC/PB VOLUME/	
VOR SENS control . . . . .	mechanical mid
TONE control . . . . .	mechanical mid
SPEED control . . . . .	NORM (mechanical mid)

##### Procedure:

Mode: playback

test tape  
WS-48A  
(3 kHz, 0 dB)



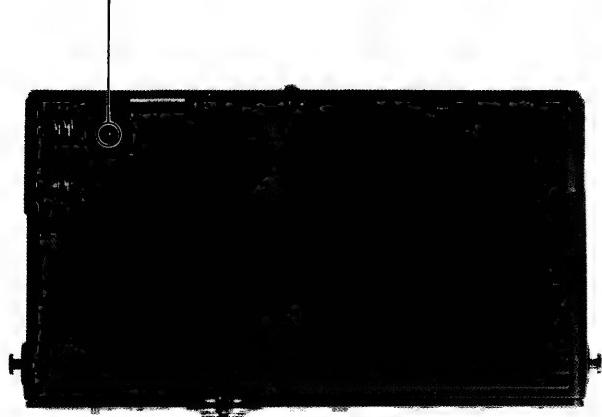
##### Specification:

Speed checker	Digital frequency counter
-1.5 to +2 %	2,955 – 3,060 Hz

Frequency difference between the beginning and the end of the tape should be within 1 % (30 Hz).

##### Adjustment Location:

RV601



#### Record/playback Head Azimuth Adjustment

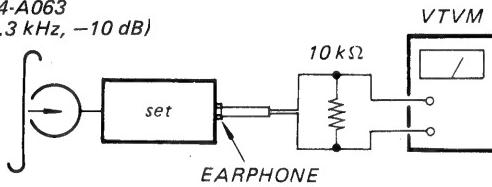
##### Setting:

REC/PB VOLUME/	
VOR SEN control . . . . .	mechanical mid
TONE control . . . . .	mechanical mid
SPEED control . . . . .	NORM (mechanical mid)

##### Procedure:

1. Mode: playback

test tape  
P-4-A063  
(6.3 kHz, -10 dB)

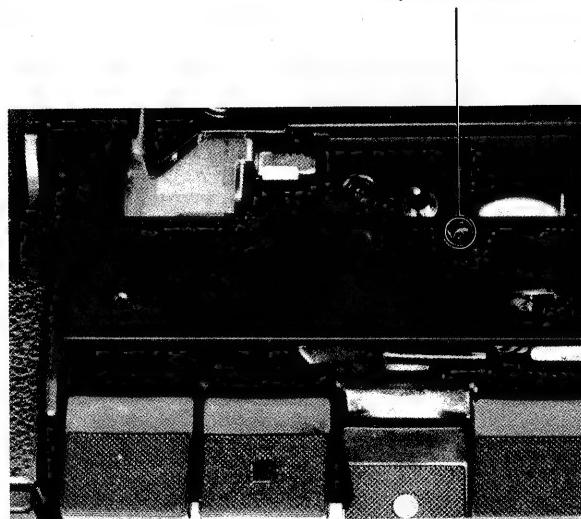


2. Turn the adjustment screw for maximum VTVM reading.

**Note:** Several peaks may appear, take the maximum.

##### Adjustment Location:

adjustment screw

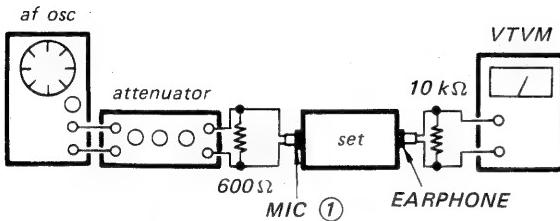


## Monitor Head Azimuth Adjustment and Lateral Alignment Setting:

REC MODE switch . . . . . MANUAL  
 TONE control . . . . . mechanical mid  
 SPEED control . . . . . NORM  
 (mechanical mid)

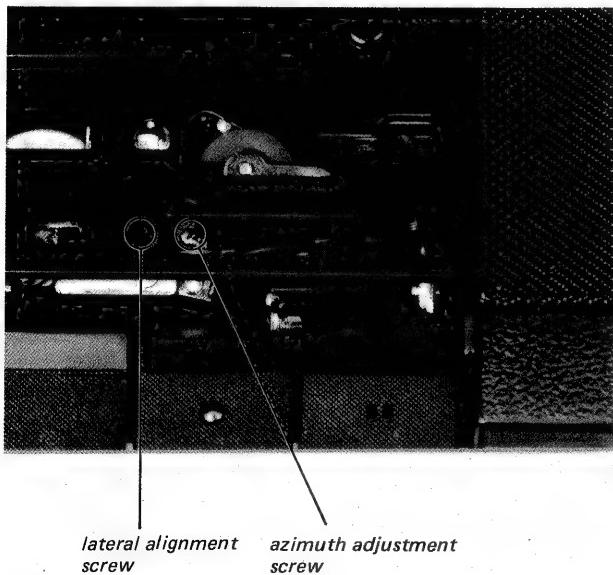
### Procedure:

1. Mode: record



2. MONITOR switch: SOURCE  
 REC/PB VOLUME/VOR SENS control: standard record (See page 15)
3. MONITOR switch: TAPE  
 MIC ① jack input level: 6.3 kHz, 0.25 mV (-70 dB)
4. Turn the lateral alignment screw and azimuth adjustment screw for maximum VTVM reading.

### Adjustment Location:



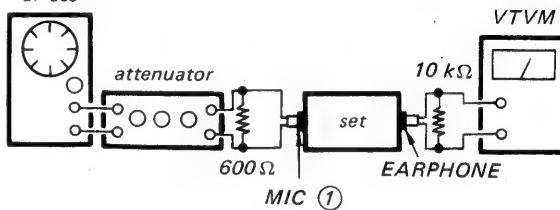
## Monitor Level Adjustment

### Setting:

REC MODE switch . . . . . MANUAL  
 TONE control . . . . . mechanical mid  
 SPEED control . . . . . NORM  
 (mechanical mid)

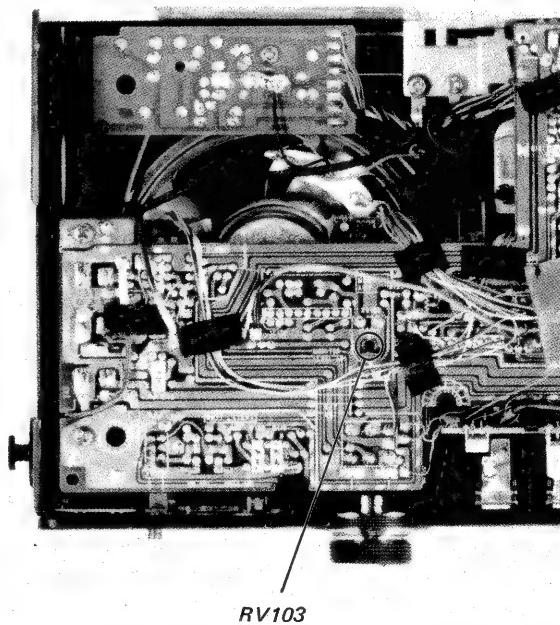
### Procedure:

1. Mode: record  
*af osc*



2. MONITOR switch: SOURCE  
 REC/PB VOLUME/VOR SENS control: standard record (See page 15)
3. MONITOR switch: TAPE
4. Adjust RV103 for 0.62 V (-2 dB) VTVM reading.

**Adjustment Location:** Audio board

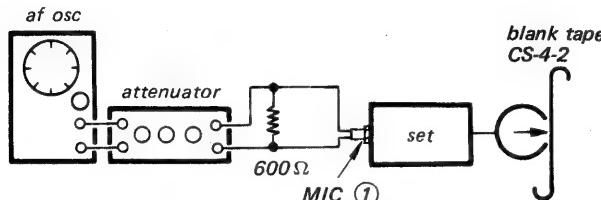


**Record Bias Adjustment****Setting:**

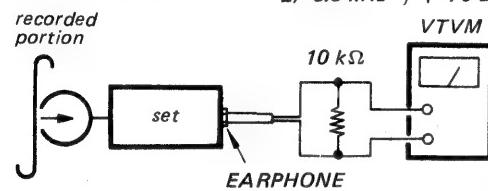
REC MODE switch ..... MANUAL  
 MONITOR switch ..... SOURCE  
 TONE control ..... mechanical mid  
 SPEED control ..... NORM  
                        (mechanical mid)  
 REC/PB VOLUME control . . standard record  
                        (see page 15)

**Procedure:**

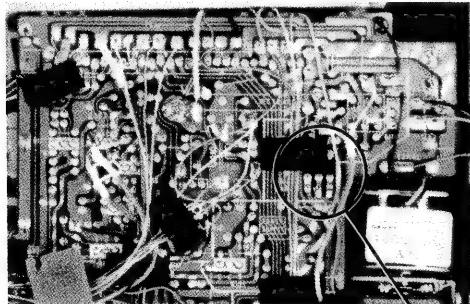
1. Mode: record



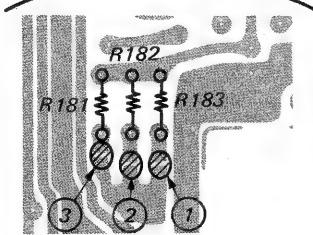
2. Mode: playback



3. Playback 333 Hz, adjust REC/PB VOLUME/VOR SENS control for 0.25 V (-10 dB) VTVM reading.
4. Playback 6.3 kHz: 0.19 – 0.31 V (-10 dB ± 2 dB)
5. If necessary, change the pattern connection for "0 dB ± 1 dB" indication on the LEVEL/BATT meter.

**Adjustment Location: Audio board**

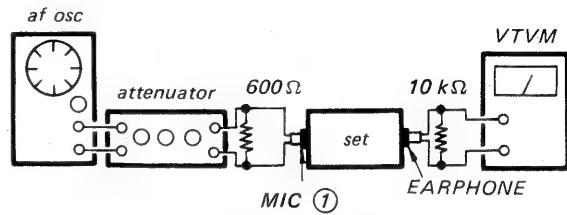
Pattern connection	6.3 kHz VTVM reading
parallel ① ② ③	up ↔ down

**Level Meter Adjustment****Setting:**

Power Supply Voltage ..... MANUAL  
 MONITOR switch ..... SOURCE  
 TONE control ..... mechanical mid  
 SPEED control ..... NORM  
                        (mechanical mid)

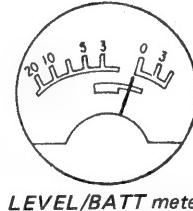
**Procedure:**

1. Mode: record

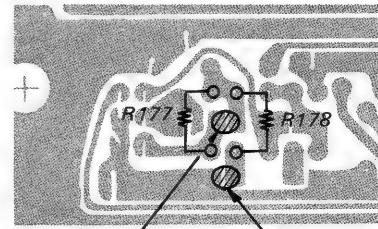
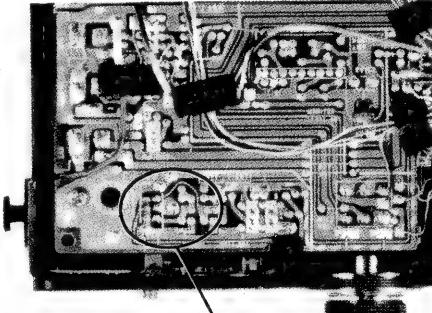


2. REC/PB VOLUME/VOR SENS control: standard record (See page 15)

3. Adjust the pattern connection for "0 dB ± 1 dB" indication on the LEVEL/BATT meter.



LEVEL/BATT meter

**Adjustment Location: Audio board**

The pointer goes to the right.

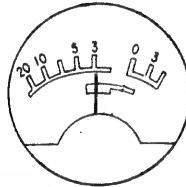
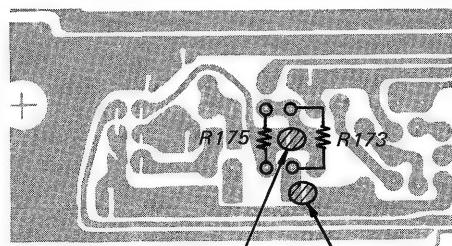
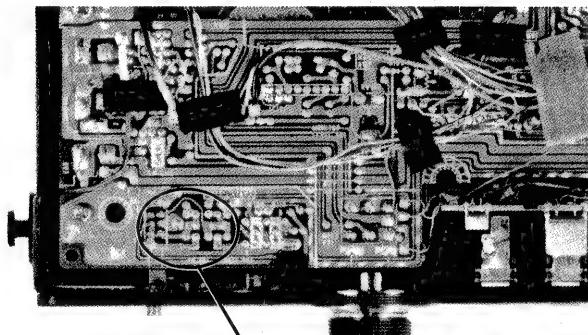
The pointer goes to the left.

**Battery Indicator Adjustment****Setting:**

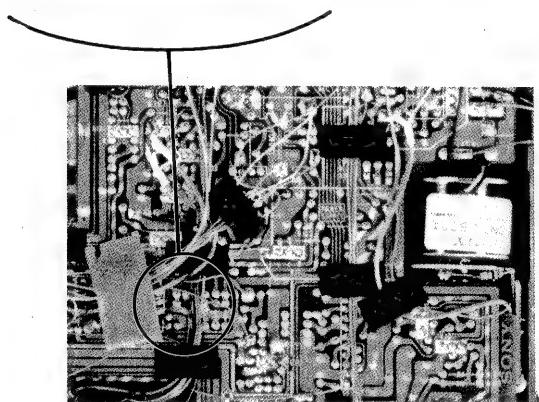
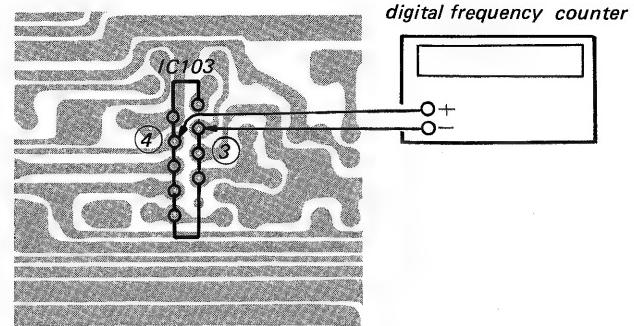
Power Supply Voltage ..... 4.4 Vdc  
 REC/PB VOLUME/  
 VOR SENS control ..... minimum  
 SPEED control ..... NORM  
 (mechanical mid)

**Procedure:**

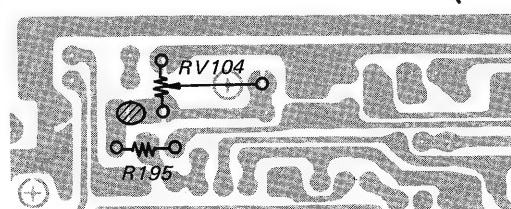
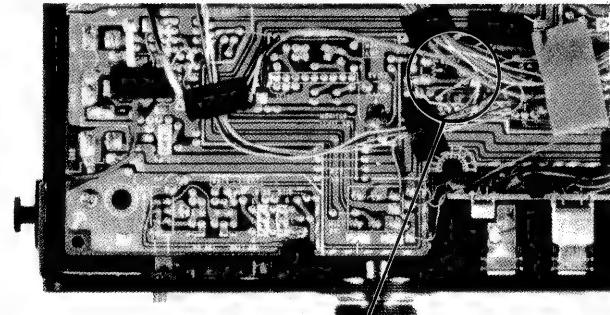
1. Mode: playback with no cassette loaded.
2. Push BATT CHECK button, adjust the pattern connection for “-4 to -2 dB” indication on the LEVEL/BATT meter.

*LEVEL/BATT meter***Adjustment Location:** Audio board*The pointer goes to the right.**The pointer goes to the left.***Pre-End Alarm Adjustment****Procedure:**

1. Mode: record

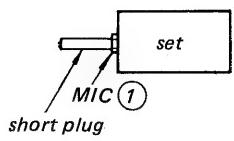


2. Adjust RV104 for 900 Hz reading on the frequency counter.
3. If necessary, solder the portion shown below and repeat the step 2.

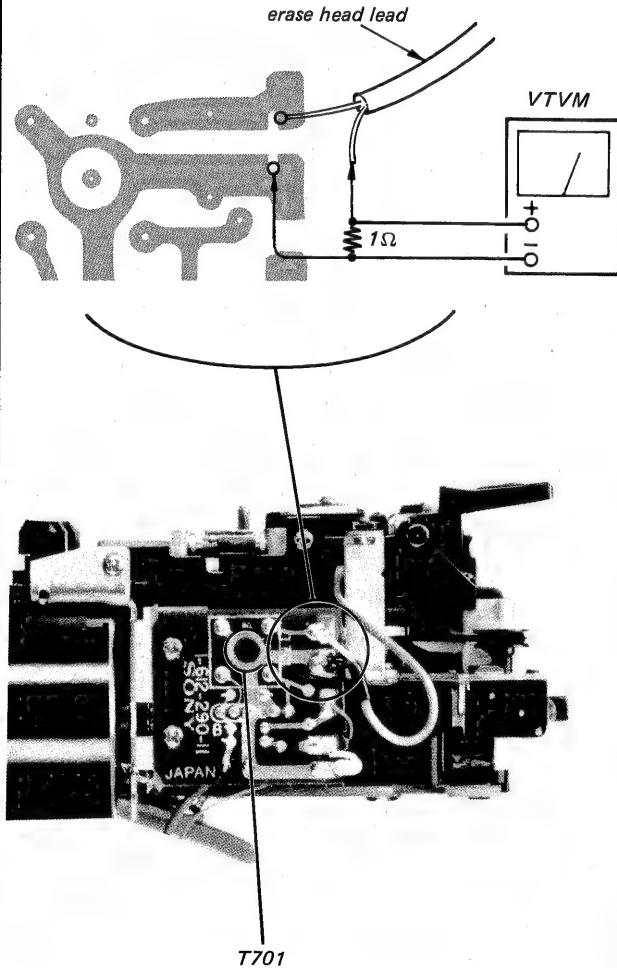
**Adjustment Location:** Audio board

**Erase Head Current Adjustment****Setting:**

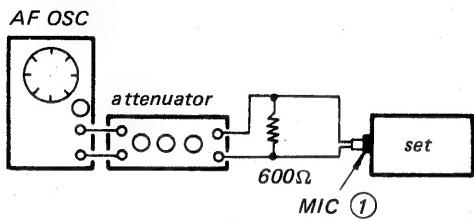
REC MODE SWITCH . . . . . MANUAL



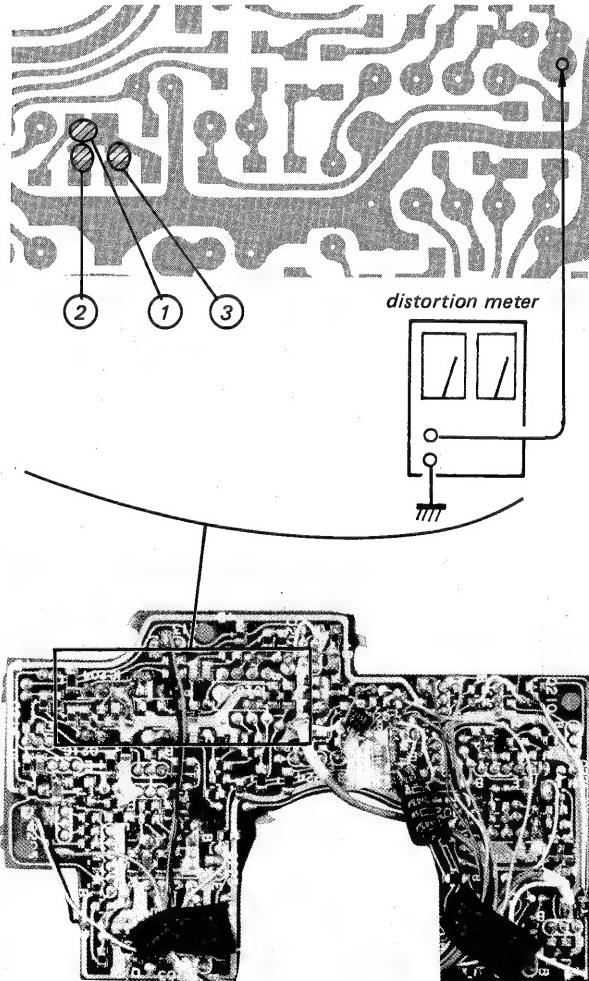
1. Remove earth-side lead of erase head and connect VTVM as illustrated below.
  2. When inserting shorting plug into MIC (1) jack and pushing REC button, adjust T701 for maximum VTVM reading.
- Specification: more than 49 mV

**Adjustment Location:** Bias board**BBD Distortion Adjustment****Setting:**

Power Supply Voltage . . . . . 4.4 V  
 REC MODE . . . . . VOR  
 REC/PB VOLUME/VOR SENS . . . . MAX

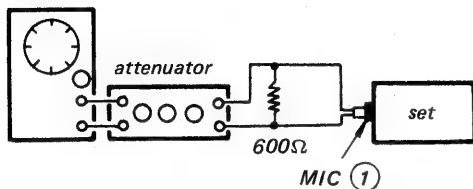
**Procedure:**

1. Connect distortion meter to the position as illustrated below.
2. Apply 1 kHz, -60 dB signal to MIC (1) jack and push REC button. Adjust the pattern connection for less than 3% distortion meter reading.

**Adjustment Location:** Control board

**Lowpass Filter Output Adjustment****Setting:**

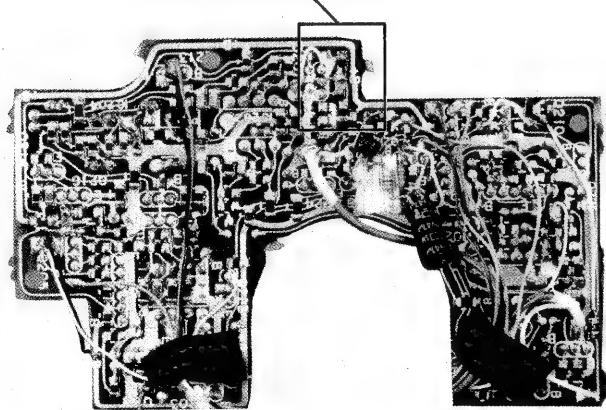
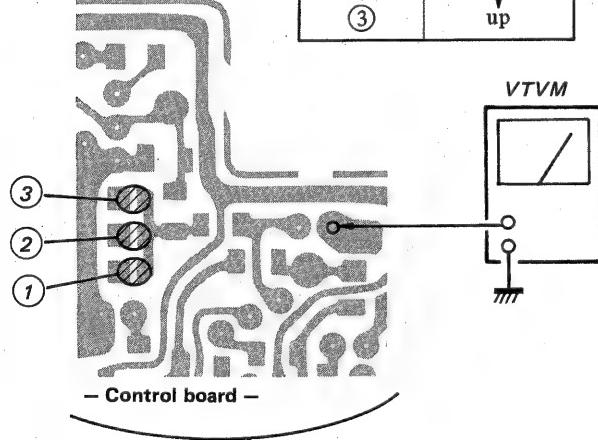
REC MODE ..... VOR  
REC/PB VOLUME/VOR SENS ..... MAX

**Procedure:****AF OSC**

1. Connect VTVM to the position as illustrated below.
2. Apply 1 kHz, -60 dB signal to MIC ① jack and push REC button. Adjust the pattern connection for  $-56 \text{ dB} \pm 2 \text{ dB}$  VTVM reading.

**Adjustment Location: Control board**

Pattern connection	VTVM reading
parallel	down
①	↑
②	↓
③	up



**SECTION 4  
DIAGRAMS**

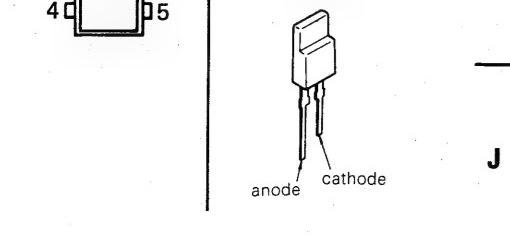
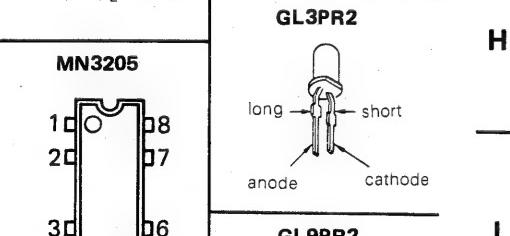
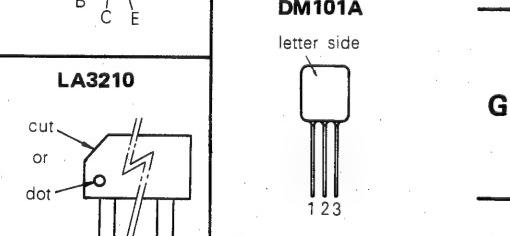
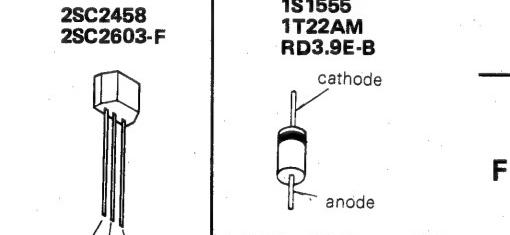
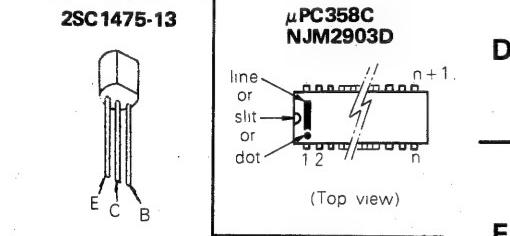
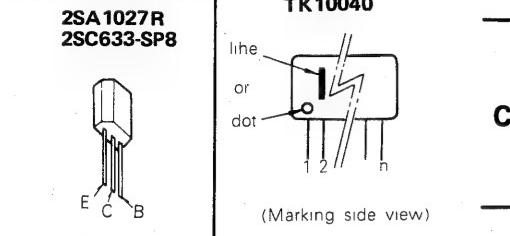
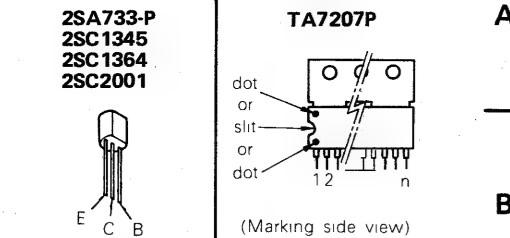
**TCM-5000EV TCM-5000EV**

**TCM-5000EV TCM-5000EV**

**4-1. MOUNTING DIAGRAM**

— Conductor Side —

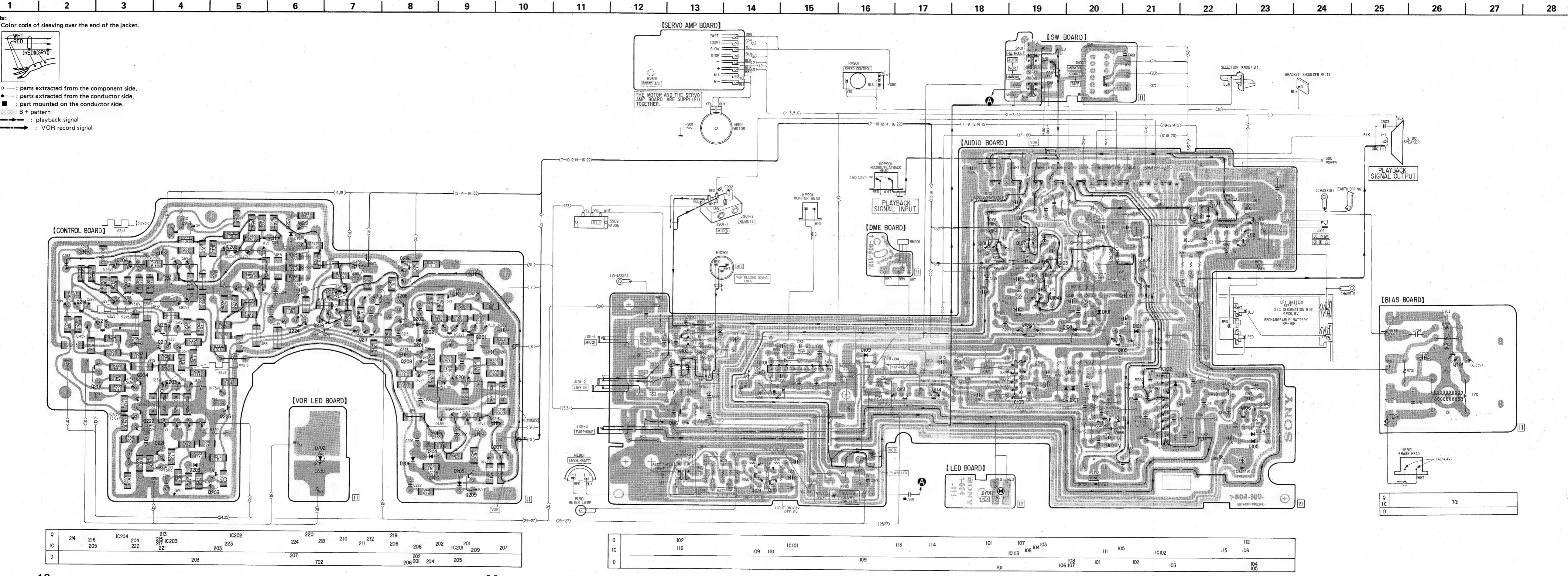
• Semiconductor Lead Layouts

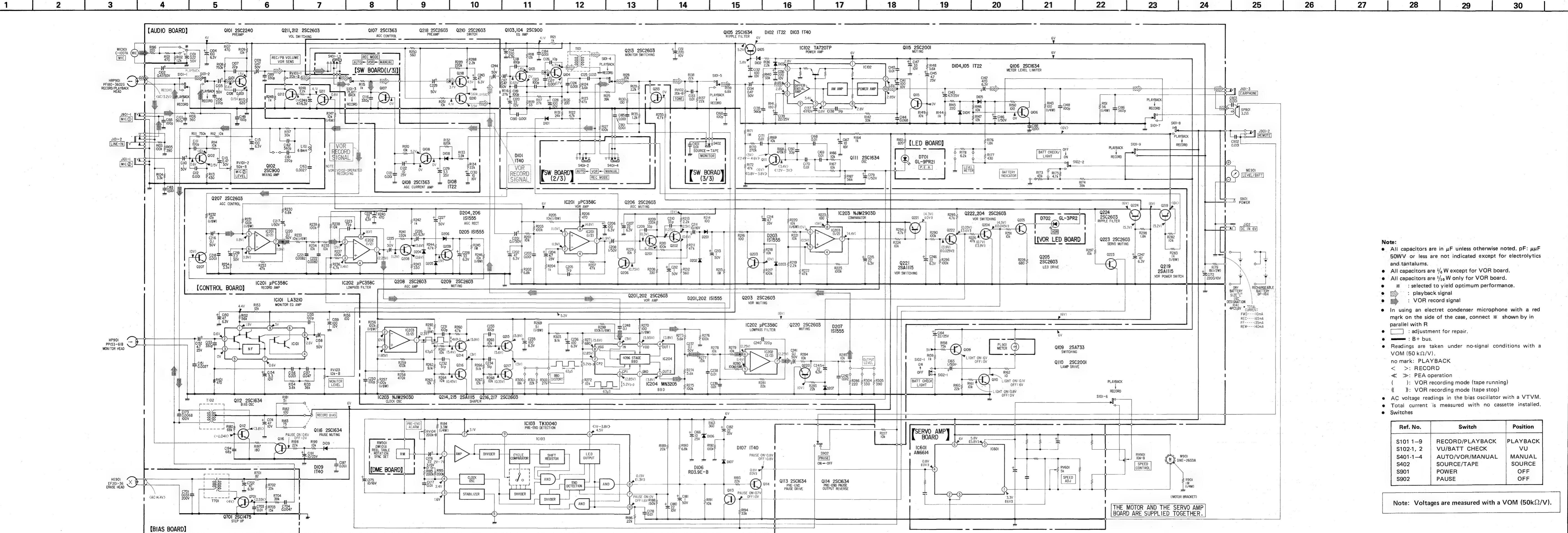


anode cathode

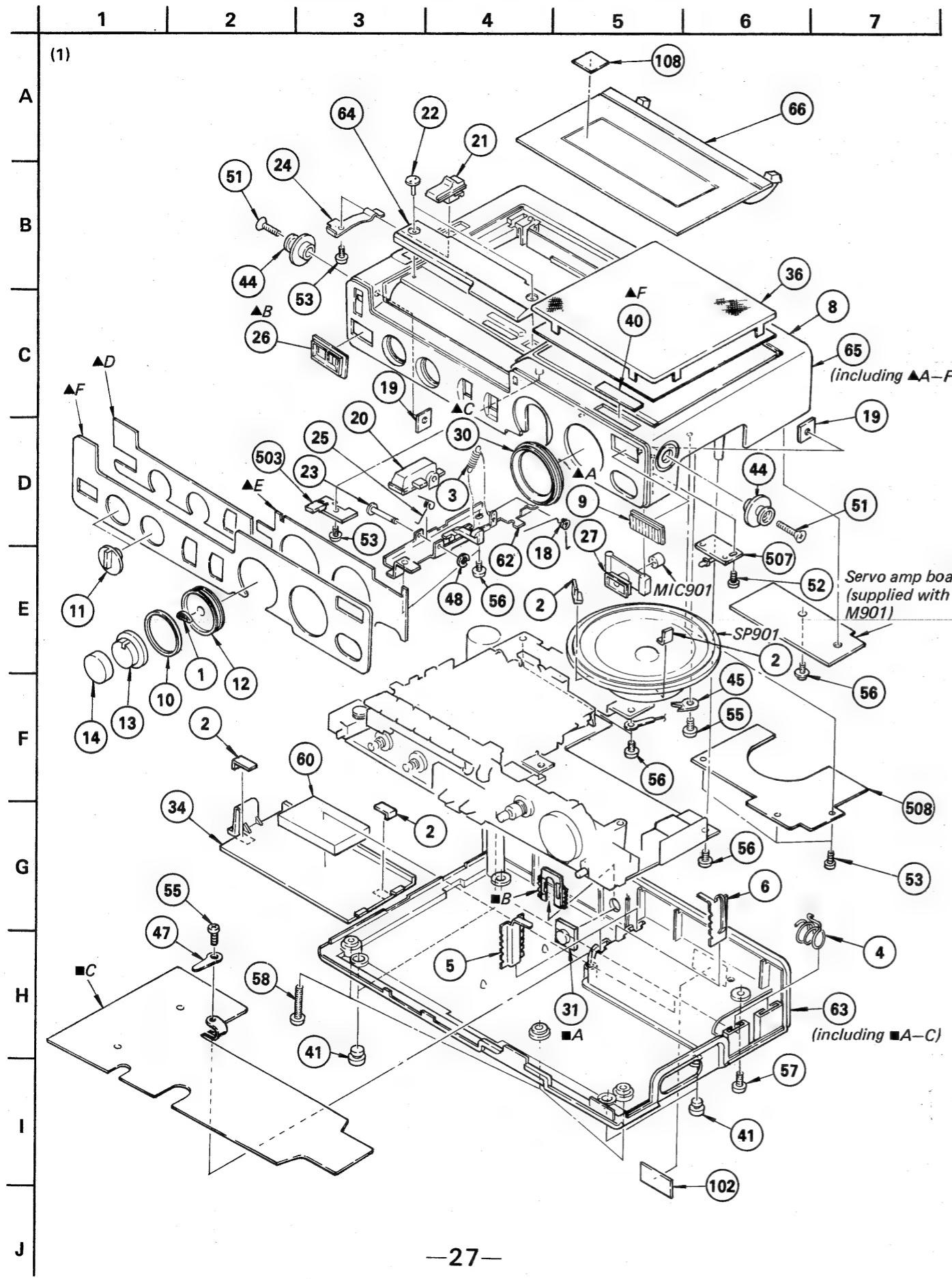
GL9PR2

anode cathode

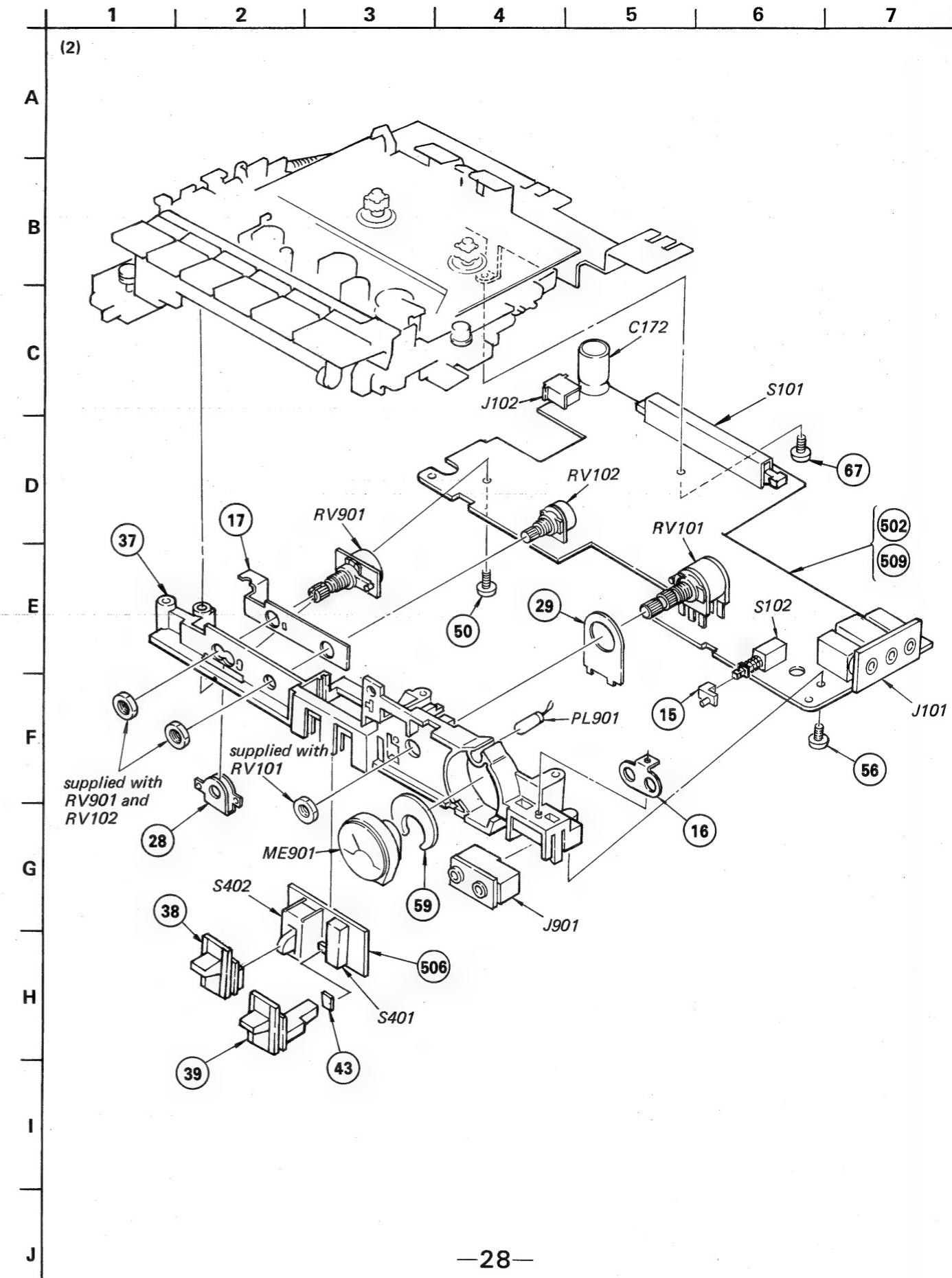




**SECTION 5**  
**EXPLODED VIEWS AND PARTS LIST**



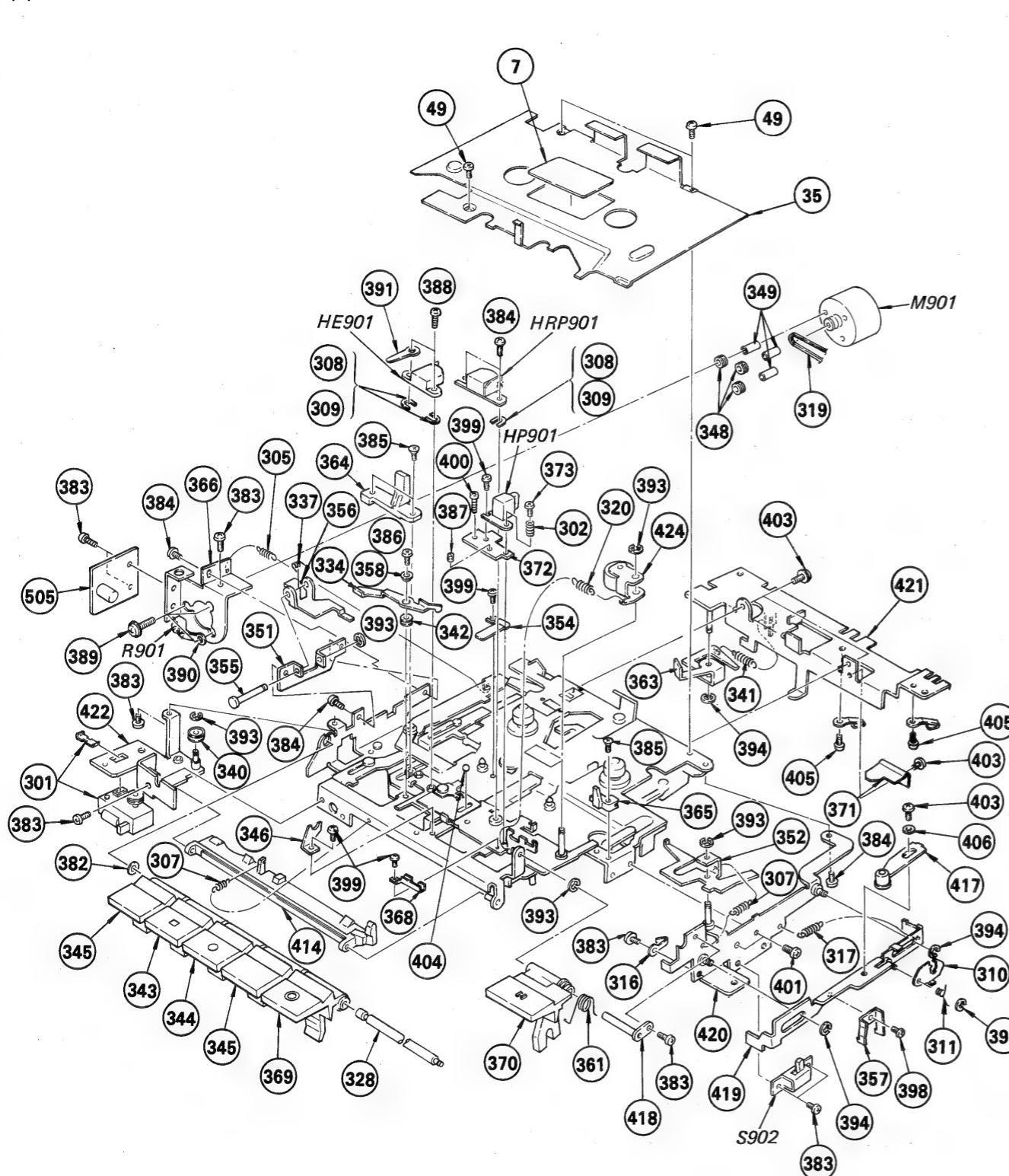
—27—



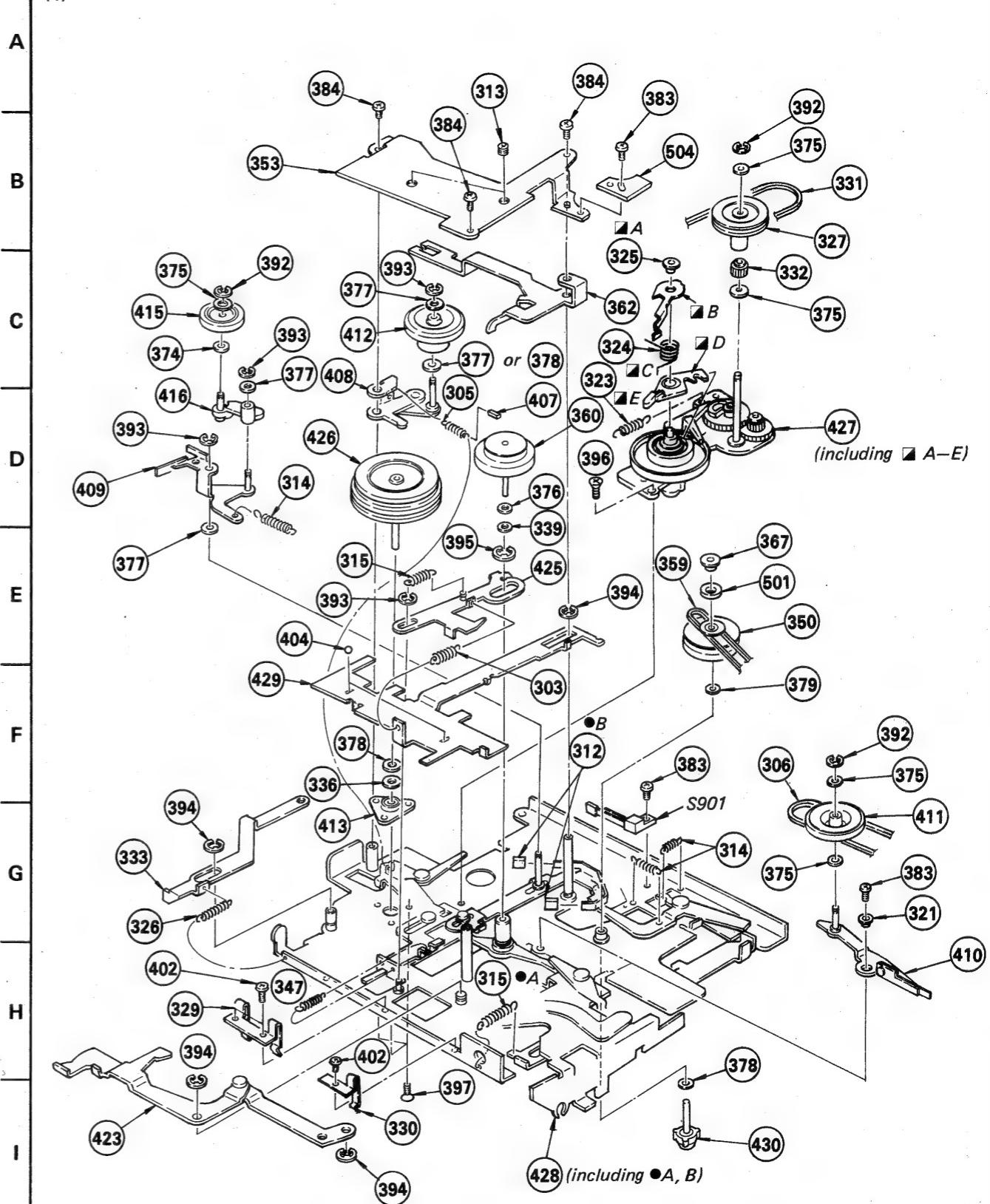
—28—

**TCM-5000EV**      **TCM-5000EV**

1 | 2 | 3 | 4 | 5 | 6 | 7



1 2 3 4 5 6 7



## GENERAL SECTION

No.	Part No.	Description
1	0-051-221-00	PAD, KNOB
2	3-485-343-01	CUSHION, CABINET UPPER 10X7X0.5
3	3-489-310-XX	SPRING, TENSION
4	3-501-055-XX	SPRING
5	3-501-056-00	TERMINAL, POSITIVE
6	3-536-912-00	CONTACT
7	3-556-221-00	PLATE, ORNAMENTAL
8	3-576-609-00	CUSHION, SPEAKER
9	3-576-610-00	GRILLE, MICROPHONE
10	3-576-611-00	RING, RUBBER
11	3-576-612-00	KNOB
12	3-576-614-00	KNOB, REC CONTROL
13	3-576-615-00	KNOB, PB
14	3-576-616-00	CAP, PB RUBBER
15	3-576-617-00	BUTTON, BATT CHECK
16	3-576-618-00	PANEL, REMOTE MICROPHONE
17	3-576-620-00	PLATE, GROUND
18	3-576-621-00	SPRING
19	3-576-622-00	BRACKET (SHOULDER BELT)
20	3-576-623-00	BUTTON, EJECT
21	3-576-624-00	KNOB, LOCK
22	3-576-625-00	SCREW, PIN-FACE
23	3-576-626-00	SHAFT, EJECT BUTTON
24	3-576-630-00	SPRING
25	3-576-631-00	SPRING
26	3-576-632-00	PANEL, COUNTER
27	3-576-633-00	HOLDER, MICROPHONE
28	3-576-634-00	BRACKET, ADJUSTMENT
29	3-576-635-00	PLATE, GROUND, CONTROL
30	3-576-636-00	RING, METER
31	3-576-637-00	SCREW, CARRYING CASE
32	.....	
33	.....	
34	3-576-641-00	LID, BATTERY CASE
35	3-576-642-00	PLATE, BLIND
36	3-576-644-00	GRILLE, SPEAKER
37	3-576-649-00	CHASSIS, MOLD
38	3-577-511-01	KNOB (A), SELECTION
39	3-577-512-01	KNOB (B), SELECTION
40	3-644-001-00	EMBLEM, SONY
41	3-701-188-XX	FOOT, RUBBER
42	.....	
43	3-831-441-XX	CUSHION
44	3-888-404-00	SHAFT, BELT
45	4-014-646-00	RETAINER, SPEAKER

## GENERAL SECTION

<u>No.</u>	<u>Part No.</u>	<u>Description</u>		
46	7-621-255-15	SCREW +P	2X3	
47	7-623-508-01	LUG, 3		
48	7-624-104-04	STOP RING 2.0, TYPE -E		
49	7-627-553-28	SCREW, PRECISION +P	2X2.5	
50	7-682-553-04	SCREW +P	3X20	
51	7-682-351-09	SCREW +RK	3X14	
52	7-685-104-14	SCREW +P	2X6	TYPE2 SLIT
53	7-685-132-21	SCREW +P	2.6X5	TYPE2 SLIT
54	7-685-133-14	SCREW +P	2.6X6	TYPE2 SLIT
55	7-685-145-14	SCREW +P	3X6	TYPE2 SLIT
56	7-685-146-14	SCREW +P	3X8	TYPE2 SLIT
57	7-685-147-29	SCREW +P	3X10	TYPE2 SLIT
58	7-685-155-29	SCREW +P	3X40	TYPE2 SLIT
59	♦;3-576-601-01	CUSHION, METER		
60	9-911-815-02	CUSHION		
61	9-911-815-03	CUSHION (PINTER)		
62	X-3576-602-0	CHASSIS ASSY, EJECT		
63	X-3576-626-1	CABINET (LOWER) ASSY		
64	X-3576-627-1	PANEL ASSY, HEAD		
65	X-3576-628-1	CABINET (UPPER) ASSY		
66	X-3576-630-1	LID ASSY, CASSETTE		
67	7-682-145-01	+P 3X4		

ACCESSORY & PACKING MATERIAL

No.	Part No.	Description
101	3-577-524-01	INDIVIDUAL CARTON
102	3-701-999-00	(US).....LABEL, SERIAL NUMBER
102	3-527-213-00	(Canadian,AEP,UK,E)...LABEL, SERIAL NUMBER
103	1-504-059-11	MAGNETIC EARPHONE(ME-20H)
104	1-528-026-00	BATTERY, NEW SUPER (SUM-2)(NS)
105	1-551-841-00	CORD, CONNECTION (RK-69A)
106	3-576-699-00	CUSHION
107	3-577-502-00	BOX, ACCESSORY
108	3-703-707-01	STICKER, SONY SYMBOL (21)
109	3-577-508-00	STOPPER
110	3-701-625-00	BAG, POLYETHYLENE
111	3-703-468-11	BAG, POLYETHYLENE
112	3-773-811-11	(AEP,UK,E).....MANUAL, INSTRUCTION
112	3-773-811-21	(US,Canadian)...MANUAL, INSTRUCTION
112	3-773-811-31	(Canadian).....MANUAL, INSTRUCTION
112	3-773-811-41	(AEP).....MANUAL, INSTRUCTION
113	3-793-828-11	QUESTIONNAIRE
114	X-2290-801-0	CASE ASSY, CARRYING
115	X-3576-625-1	BELT ASSY, CARRYING

## CAPACITORS;

MF:  $\mu F$ , PF:  $\mu\mu F$ .

## RESISTORS

- All resistors are in ohms.  
F : nonflammable

## COILS

- MMH : mH, UH :  $\mu$ H

## SEMICONDUCTORS

In each case,  $U : \mu$ , for example:  
 $UA\cdots : \mu A\cdots$ ,  $UPA\cdots : \mu PA\cdots$ ,  $UPC\cdots : \mu PC$ ,  
 $UPD\cdots : \mu PD\cdots$

**NOTE:**

- The mechanical parts with no reference number in the exploded views are not supplied.
  - Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
  - Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta-\Delta\Delta-XX$  or  $\Delta-\Delta\Delta\Delta-\Delta\Delta-X$ ) may be different from those used in the set.
  - If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

MECHANISM SECTION

No.	Part No.	Description
301	1-548-548-00	COUNTER, TAPE (SUPER SMALL)
302	3-318-106-01	SPRING (H), COMPRESSION
303	3-437-026-00	SPRING, TENSION
304	.....	
305	3-489-310-XX	SPRING, TENSION
306	3-507-115-00	BELT, (A)
307	3-509-127-00	SPRING, TENSION
308	3-513-237-01	PLATE
309	3-513-237-11	PLATE
310	3-515-074-00	PLATE, LOCK
311	3-515-076-00	SPRING
312	3-527-028-00	RUBBER, BRAKE
313	3-527-140-00	SCREW, THRUST
314	3-527-188-00	SPRING, TENSION
315	3-527-193-00	SPRING, TENSION
316	3-528-086-00	RETAINER, CORD
317	3-530-279-00	SPRING, TENSION
318	.....	
319	3-538-931-00	BELT, DRIVE
320	3-539-227-00	SPRING, TENSION
321	3-545-508-00	SPACER
322	.....	
323	3-545-542-00	SPRING, TENSION
324	3-545-550-00	SPRING, COMPRESSION
325	3-545-551-00	RETAINER (D), SPRING
326	3-545-588-00	SPRING, TENSION
327	3-545-592-00	PULLEY, MIDWAY
328	♦;3-545-593-00	SHAFT, BUTTON
329	3-545-597-00	SPRING
330	3-545-598-00	SPRING
331	3-545-601-XX	BELT, MIDWAY PULLEY
332	3-545-606-00	GEAR
333	♦;3-545-608-00	LEVER (B), SHUT-OFF
334	3-545-609-11	LEVER (A), REVIEW
335	.....	
336	3-545-715-00	WASHER
337	3-545-787-00	SPRING
338	.....	
339	3-547-734-00	WASHER
340	3-549-452-00	PULLEY, SHUT-OFF
341	3-554-122-00	SPRING, TENSION
342	3-556-280-00	ROLLER, GUIDE
343	3-557-837-00	BUTTON, STOP
344	3-557-839-00	BUTTON, FWD
345	3-557-840-00	BUTTON, FR

MECHANISM SECTION

No.	Part No.	Description
346	3-557-846-00	HOLDER, BUTTON SHAFT
347	3-559-434-00	SPRING, TENSION
348	3-566-030-00	RUBBER, VIBRATION PROOF
349	3-566-031-00	SPACER
350	3-566-041-00	PULLEY, S REEL TABLE
351 ♦;3-576-650-00	BRACKET, EJECT	
352 ♦;3-576-651-00	LEVER, PAUSE	
353 ♦;3-576-654-00	RETAINER, THRUST	
354 ♦;3-576-655-00	RETAINER, CHASSIS, HEAD	
355 ♦;3-576-656-00	SHAFT, LEVER, EJECT	
356 ♦;3-576-657-00	BRACKET, EJECT	
357	3-576-665-00	SPRING
358 ♦;3-576-673-00	SPACER	
359	3-576-677-00	BELT
360	3-576-678-00	FLYWHEEL (B)
361	3-576-679-00	SPRING
362 ♦;3-576-680-00	LEVER, PREVENTION, SHAFT OFF	
363 ♦;3-576-681-00	LEVER, SUPPORT, REC	
364	3-576-683-00	GUIDE (L), CASSETTE
365	3-576-684-00	GUIDE (R), CASSETTE
366 ♦;3-576-685-00	BRACKET, MOTOR	
367	3-576-687-00	BUSHING
368 ♦;3-576-688-00	RETAINER, LEAD, HEAD	
369	3-576-693-00	BUTTON, REC
370	3-576-694-00	BUTTON, PAUSE
371 ♦;3-577-503-00	PLATE, SHIELD	
372 ♦;3-577-516-01	TABLE, MONITOR HEAD	
373	3-577-517-01	SCREW (1.7), PRECISION SPECIAL
374	3-701-436-01	WASHER, 1.6
375	3-701-436-11	WASHER, 1.6
376	3-701-436-21	WASHER, POLYETHYLENE
377	3-701-437-01	WASHER
378	3-701-437-11	WASHER
379	3-701-437-21	WASHER
380	3-701-439-01	WASHER
381	3-701-439-11	WASHER
382	3-701-440-21	WASHER, 3.5
383	7-621-255-15	SCREW +P 2X3
384	7-621-255-25	SCREW +P 2X4
385	7-621-555-30	SCREW +K 2X5
386	7-621-555-52	SCREW +K 2X8
387	7-621-710-25	SET-SCREW, SLOT 2X3 CONE POINT
388	7-621-772-20	SCREW +B 2X5
389	7-621-955-45	SCREW, TOTSU PWH 2X6
390	7-623-505-01	LUG, 2

## CAPACITORS:

MF:μF, PF:μμF.

## RESISTORS

All resistors are in ohms.

F : nonflammable

## COILS

MMH : mH, UH : μH

## SEMICONDUCTORS

In each case, U : μ, for example:

UA---: μA---, UPA---: μPA---, UPC---: μPC,

UPD---: μPD---

## NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

MECHANISM SECTION

No.	Part No.	Description
391	7-623-507-01	LUG, 2.6
392	7-624-101-04	STOP RING 1.2 (E TYPE)
393	7-624-102-04	STOP RING 1.5, TYPE -E
394	7-624-104-04	STOP RING 2.0, TYPE -E
395	7-624-109-04	STOP RING 5.0, TYPE -E
396	7-627-452-17	SCREW, PRECISION +K 2X2
397	7-627-452-28	SCREW, PRECISION +K 2X4
398	7-627-552-27	SCREW, PRECISION +P 1.7X2
399	7-627-553-13	SCREW, PRECISION +P 2X2
400	7-627-553-37	SCREW, PRECISION +P 2X3
401	7-627-554-17	SCREW, PRECISION +P 2X3.5
402	7-627-853-27	PRECISION SCREW +P. 2X3 TYPE 3
403	7-628-253-05	SCREW +PS 2X4
404	7-671-112-01	STEEL, BALL
405	7-682-544-04	SCREW +P 3X3
406	7-688-001-11	W 2, MIDDLE
407	9-911-815-02	CUSHION
408	●;X-3545-511-0	LEVER (C) ASSY, FF
409	●;X-3545-512-0	LEVER (A) ASSY, FWD
410	X-3545-513-0	LEVER (B) ASSY, REW
411	X-3545-514-0	PULLEY ASSY, REW
412	X-3545-515-0	PULLEY ASSY, FF
413	X-3545-516-0	RETAINER ASSY, CAPSTAN SHAFT
414	X-3545-517-0	PLATE ASSY, LOCK
415	X-3545-521-0	PULLEY ASSY, FWD
416	X-3545-533-0	LEVER (B) ASSY, FWD
417	●;X-3556-208-0	PLATE ASSY, RELEASE, PINCH
418	●;X-3556-219-0	SHAFT ASSY, PAUSE
419	X-3576-605-0	SLIDER ASSY, PAUSE
420	X-3576-606-0	CHASSIS ASSY, PAUSE
421	●;X-3576-608-0	BRACKET ASSY, MD
422	●;X-3576-609-0	BRACKET ASSY, COUNTER
423	●;X-3576-610-0	LEVER (A) ASSY, REC
424	X-3576-611-0	PINCH LEVER ASSY
425	●;X-3576-614-0	CHASSIS ASSY, FWD
426	X-3576-615-0	FLYWHEEL ASSY
427	X-3576-617-0	SHUT-OFF COMPLETE ASSY
428	X-3576-618-0	CHASSIS ASSY, MECHANICAL
429	X-3576-624-1	CHASSIS ASSY, HEAD
430	3-577-521-01	SHAFT, REEL

## NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta-\Delta\Delta-XX$  or  $\Delta-\Delta\Delta\Delta-\Delta\Delta-X$ ) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

ELECTRICAL PARTS

Ref.No.	Part No.	Description	Value	Tolerance	Voltage
501	1-452-193-00	MAGNET			
502	●;1-604-109-00	PC BOARD, AUDIO			
503	●;1-604-111-00	PC BOARD, LED			
504	●;1-604-112-00	PC BOARD, DME			
505	●;1-612-290-11	PC BOARD, BIAS			
506	●;1-612-291-11	PC BOARD, SW			
507	●;1-612-292-11	PC BOARD, VOR LED			
508	●;A-3015-251-A	PC BOARD ASSY, CONTROL			
509	●;A-3070-122-A	PC BOARD ASSY, AUDIO			
C101	1-124-464-11	ELECT	0.22MF	20%	50V
C102	1-123-379-00	ELECT	0.47MF	20%	50V
C103	1-102-115-00	CERAMIC	560PF	10%	50V
C104	1-123-307-00	ELECT	100MF	20%	6.3V
C105	1-123-380-00	ELECT	1MF	20%	50V
C106	1-102-110-00	CERAMIC	220PF	10%	50V
C107	1-102-959-00	CERAMIC	22PF	5%	50V
C108	1-102-074-00	CERAMIC	0.001MF	10%	50V
C109	1-123-379-00	ELECT	0.47MF	20%	50V
C110	1-123-380-00	ELECT	1MF	20%	50V
C111	1-102-106-00	CERAMIC	100PF	10%	50V
C112	1-102-074-00	CERAMIC	0.001MF	10%	50V
C113	1-123-379-00	ELECT	0.47MF	20%	50V
C114	1-123-308-00	ELECT	220MF	20%	6.3V
C115	1-123-307-00	ELECT	100MF	20%	6.3V
C116	1-102-112-00	CERAMIC	330PF	10%	50V
C117	1-123-379-00	ELECT	0.47MF	20%	50V
C118	1-102-106-00	CERAMIC	100PF	10%	50V
C119	1-102-106-00	CERAMIC	100PF	10%	50V
C120	1-123-318-00	ELECT	33MF	20%	10V
C121	1-108-227-00	MYLAR	0.001MF	10%	50V
C122	1-123-356-00	ELECT	10MF	20%	25V
C123	1-102-106-00	CERAMIC	100PF	10%	50V
C124	1-108-227-00	MYLAR	0.001MF	10%	50V
C125	1-108-591-00	MYLAR	0.033MF	5%	50V
C126	1-102-947-00	CERAMIC	10PF	5%	50V
C127	1-102-074-00	CERAMIC	0.001MF	10%	50V
C128	1-123-307-00	ELECT	100MF	20%	10V
C129	1-123-613-00	ELECT	3.3MF	20%	35V
C130	1-123-617-00	ELECT	10MF	20%	16V
C131	1-123-308-00	ELECT	220MF	20%	10V
C132	1-123-307-00	ELECT	100MF	20%	10V
C133	1-108-579-00	MYLAR	0.01MF	5%	50V
C134	1-123-379-00	ELECT	0.47MF	20%	50V
C135	1-102-115-00	CERAMIC	560PF	10%	50V
C136	1-123-308-00	ELECT	220MF	20%	10V

## CAPACITORS:

MF:μF, PF:μμF.

## RESISTORS

All resistors are in ohms.

F : nonflammable

## COILS

MMH : mH, UH : μH

## SEMICONDUCTORS

In each case, U : μ, for example:

UA...: μA..., UPA...: μPA..., UPC...: μPC,

UPD...: μPD...

ELECTRICAL PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>							
C137	1-123-306-00	ELECT	47MF	20%	10V				
C138	1-101-882-00	CERAMIC	51PF	5%	50V				
C139	1-123-330-00	ELECT	22MF	20%	25V				
C140	1-108-239-00	MYLAR	0.01MF	10%	50V				
C141	1-123-307-00	ELECT	100MF	20%	10V				
C142	1-123-298-00	ELECT	470MF	20%	6.3V				
C143	1-123-369-00	ELECT	4.7MF	20%	25V				
C144	1-108-599-00	MYLAR	0.068MF	10%	50V				
C145	1-123-369-00	ELECT	4.7MF	20%	25V				
C146	1-123-380-00	ELECT	1MF	20%	50V				
C147	1-123-318-00	ELECT	33MF	20%	10V				
C148	1-102-106-00	CERAMIC	100PF	10%	50V				
C149	1-102-106-00	CERAMIC	100PF	10%	50V				
C150	1-123-306-00	ELECT	47MF	20%	6.3V				
C151	1-108-565-00	MYLAR	0.0027MF	5%	50V				
C152	1-123-369-00	ELECT	4.7MF	20%	25V				
C153	1-102-112-00	CERAMIC	330PF	10%	50V				
C154	1-131-501-00	TANTALUM	3.3MF	10%	10V				
C155	1-161-271-00	CERAMIC	100PF	5%	50V				
C156	1-102-074-00	CERAMIC	0.001MF	10%	50V				
C157	1-108-595-00	MYLAR	0.047MF	5%	50V				
C158	1-123-380-00	ELECT	1MF	20%	50V				
C159	1-123-307-00	ELECT	100MF	20%	10V				
C160	1-161-271-00	CERAMIC	100PF	5%	50V				
C161	1-102-110-00	CERAMIC	220PF	10%	50V				
C162	1-102-115-00	CERAMIC	560PF	10%	50V				
C163	1-108-565-00	MYLAR	0.0027MF	5%	50V				
C164	1-123-330-00	ELECT	22MF	20%	25V				
C165	1-123-380-00	ELECT	1MF	20%	50V				
C166	1-123-356-00	ELECT	10MF	20%	25V				
C167	1-123-617-00	ELECT	10MF	20%	16V				
C168	1-161-013-00	CERAMIC	0.01MF	10%	25V				
C169	1-161-013-00	CERAMIC	0.01MF	10%	25V				
C170	1-161-013-00	CERAMIC	0.01MF	10%	25V				
C171	1-161-013-00	CERAMIC	0.01MF	10%	25V				
C172	1-123-325-00	ELECT	2200MF	20%	10V				
C173	1-106-192-00	MYLAR	0.0068MF	5%	100V				
C174	1-123-306-00	ELECT	47MF	20%	10V				
C175	1-123-617-00	ELECT	10MF	20%	16V				
C176	1-131-391-00	TANTALUM	22MF	20%	3.15V				
C177	1-161-013-00	CERAMIC	0.01MF	10%	25V				
C178	1-161-013-00	CERAMIC	0.01MF	10%	25V				
C179	1-123-611-00	ELECT	1MF	20%	50V				
C180	1-123-644-00	ELECT	22MF	20%	10V				
C181	1-123-611-00	ELECT	1MF	20%	50V				

ELECTRICAL PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>							
C182	1-123-330-00	ELECT	22MF	20%	25V				
C183	1-102-074-00	CERAMIC	0.001MF	10%	50V				
C184	1-161-323-00	CERAMIC	0.001MF	10%	50V				
C185	1-102-074-00	CERAMIC	0.001MF	10%	50V				
C186	1-102-115-00	CERAMIC	560PF	10%	50V				
C187	1-102-074-00	CERAMIC	0.001MF	10%	50V				
C188	1-102-074-00	CERAMIC	0.001MF	10%	50V				
C189	1-102-112-00	CERAMIC	330PF	10%	50V				
C190	1-102-074-00	CERAMIC	0.001MF	10%	50V				
C191	1-123-356-00	ELECT	10MF	20%	25V				
C192	1-102-963-00	CERAMIC	33PF	5%	50V				
C193	1-102-106-00	CERAMIC	100PF	10%	50V				
C194	1-101-888-00	CERAMIC	68PF	5%	50V				
C201	1-123-607-00	ELECT	0.1MF	20%	50V				
C202	1-123-647-00	ELECT	47MF	20%	6.3V				
C203	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V				
C204	1-123-616-00	ELECT	4.7MF	20%	25V				
C205	1-163-110-00	CERAMIC CHIP	51PF	10%	50V				
C206	1-123-661-00	ELECT	100MF	20%	6.3V				
C207	1-123-618-00	ELECT	22MF	20%	6.3V				
C208	1-123-611-00	ELECT	1MF	20%	50V				
C209	1-163-105-00	CERAMIC CHIP	33PF	10%	50V				
C210	1-163-105-00	CERAMIC CHIP	33PF	10%	50V				
C211	1-123-617-00	ELECT	10MF	20%	16V				
C212	1-123-611-00	ELECT	1MF	20%	50V				
C213	1-123-611-00	ELECT	1MF	20%	50V				
C214	1-123-615-00	ELECT	4.7MF	20%	35V				
C215	1-123-618-00	ELECT	22MF	20%	6.3V				
C216	1-123-607-00	ELECT	0.1MF	20%	50V				
C217	1-123-611-00	ELECT	1MF	20%	50V				
C218	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V				
C219	1-123-612-00	ELECT	2.2MF	20%	50V				
C220	1-123-607-00	ELECT	0.1MF	20%	50V				
C221	1-163-020-00	CERAMIC CHIP	0.0082MF	10%	50V				
C222	1-163-020-00	CERAMIC CHIP	0.0082MF	10%	50V				
C223	1-163-114-00	CERAMIC CHIP	75PF	10%	50V				
C224	1-123-618-00	ELECT	22MF	20%	6.3V				
C225	1-123-611-00	ELECT	1MF	20%	50V				
C226	1-123-618-00	ELECT	22MF	20%	6.3V				
C227	1-123-611-00	ELECT	1MF	20%	50V				
C228	1-123-646-00	ELECT	33MF	20%	6.3V				
C229	1-123-611-00	ELECT	1MF	20%	50V				
C230	1-163-181-00	CERAMIC CHIP	100PF	5%	50V				
C231	1-163-117-00	CERAMIC CHIP	100PF	10%	50V				
C232	1-163-110-00	CERAMIC CHIP	51PF	10%	50V				

## NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-XX$  or  $\Delta-\Delta\Delta\Delta\Delta-\Delta\Delta\Delta-X$ ) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

## CAPACITORS:

MF:  $\mu F$ , PF:  $\mu\mu F$ .

## RESISTORS

- All resistors are in ohms.

F : nonflammable

## COILS

MMH : mH, UH :  $\mu H$ 

## SEMICONDUCTORS

In each case, U :  $\mu$ , for example:UA...:  $\mu A$ ..., UPA...:  $\mu PA$ ..., UPC...:  $\mu PC$ ,UPD...:  $\mu PD$ ...

ELECTRICAL PARTS

Ref.No.	Part No.	Description	Value	Unit
C233	1-163-117-00	CERAMIC CHIP 100PF	10%	50V
C234	1-163-110-00	CERAMIC CHIP 51PF	10%	50V
C235	1-123-661-00	ELECT 100MF	20%	6.3V
C236	1-123-661-00	ELECT 100MF	20%	6.3V
C237	1-123-607-00	ELECT 0.1MF	20%	50V
C238	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C239	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C240	1-163-001-00	CERAMIC CHIP 220PF	10%	50V
C241	1-123-607-00	ELECT 0.1MF	20%	50V
C242	1-163-022-00	CERAMIC CHIP 0.012MF	10%	50V
C243	1-123-647-00	ELECT 47MF	20%	6.3V
C244	1-123-611-00	ELECT 1MF	20%	50V
C245	1-123-618-00	ELECT 22MF	20%	6.3V
C246	1-123-618-00	ELECT 22MF	20%	6.3V
C247	1-123-647-00	ELECT 47MF	20%	6.3V
C248	1-163-077-00	CERAMIC CHIP 0.1MF		50V
C249	1-123-647-00	ELECT 47MF	20%	6.3V
C401	1-161-013-00	CERAMIC 0.01MF	10%	25V
C701	1-108-427-12	MYLAR 0.033MF	5%	200V
C702	1-123-647-00	ELECT 47MF	20%	6.3V
C703	1-108-377-00	MYLAR 0.01MF	10%	100V
C704	1-108-373-00	MYLAR 0.0047MF	10%	100V
C901	1-102-074-00	CAP, CERAMIC 0.001MF B		
C902	1-102-074-00	CAP, CERAMIC 0.001MF B		
C903	1-102-074-00	CAP, CERAMIC 0.001MF B		
D101	8-719-815-55	DIODE 1S1555		
D102	8-719-422-21	DIODE 1T22AM		
D103	8-719-815-55	DIODE 1S1555		
D104	8-719-422-21	DIODE 1T22AM		
D105	8-719-422-21	DIODE 1T22AM		
D106	8-719-139-07	DIODE RD3.9E-B		
D107	8-719-815-55	DIODE 1S1555		
D108	8-719-422-21	DIODE 1T22AM		
D109	8-719-815-55	DIODE 1S1555		
D201	8-719-815-55	DIODE 1S1555		
D202	8-719-815-55	DIODE 1S1555		
D203	8-719-815-55	DIODE 1S1555		
D204	8-719-815-55	DIODE 1S1555		
D205	8-719-815-55	DIODE 1S1555		
D206	8-719-815-55	DIODE 1S1555		
D207	8-719-815-55	DIODE 1S1555		
D701	8-719-909-21	DIODE GL-9PR21		
D702	8-719-930-32	DIODE GL-3PR2		
HE901	8-825-724-00	HEAD, ERASE EF-201-36		
HP901	8-829-361-20	HEAD, MONITOR (PP153-61B)		

## NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-XX$  or  $\Delta-\Delta\Delta\Delta\Delta-\Delta\Delta\Delta-X$ ) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

## CAPACITORS:

MF: $\mu$ F, PF: $\mu\mu$ F.

## RESISTORS

• All resistors are in ohms.

• F : nonflammable

## COILS

• MMH : mH, UH :  $\mu$ H

## SEMICONDUCTORS

In each case, U :  $\mu$ , for example:UA... :  $\mu$ A..., UPA... :  $\mu$ PA..., UPC... :  $\mu$ PC,UPD... :  $\mu$ PD...ELECTRICAL PARTS

Ref.No.	Part No.	Description	Value	Unit
HRP901	8-825-711-70	HEAD, R/P (PF180-3602G)		
IC101	8-759-832-10	IC LA3210		
IC102	8-759-272-07	IC TA7207P		
IC103	1-806-020-21	IC TK10040		
IC201	8-759-135-80	IC UPC358C		
IC202	8-759-135-80	IC UPC358C		
IC203	8-759-729-03	IC NJM2903D		
IC204	8-759-400-15	IC MN3205		
J101	1-507-722-00	JACK 3P		
J102	1-507-626-00	JACK, POWER OUTSIDE		
J902	1-507-591-00	JACK		
JP1	1-216-295-00	METAL CHIP 0	5%	1/10W
JP2	1-216-295-00	METAL CHIP 0	5%	1/10W
JP3	1-216-295-00	METAL CHIP 0	5%	1/10W
JP4	1-216-295-00	METAL CHIP 0	5%	1/10W
JP5	1-216-295-00	METAL CHIP 0	5%	1/10W
JP6	1-216-296-00	METAL CHIP 0	5%	1/8W
JP7	1-216-296-00	METAL CHIP 0	5%	1/8W
JP8	1-216-296-00	METAL CHIP 0	5%	1/8W
JP9	1-216-296-00	METAL CHIP 0	5%	1/8W
JP10	1-216-296-00	METAL CHIP 0	5%	1/8W
JP11	1-216-296-00	METAL CHIP 0	5%	1/8W
JP12	1-216-296-00	METAL CHIP 0	5%	1/8W
JW113♦;1-535-149-11		WIRE (30.0MM)		
JW114♦;1-535-149-11		WIRE (30.0MM)		
L101	1-407-502-00	MICRO INDUCTOR 6.8MMH		
M901	8-835-060-01	MOTOR, DC (DNE-2603A)		
ME901	1-520-433-00	METER, LEVEL		
MIC901	8-814-189-31	MICROPHONE, BUILT-IN (C-1007A)		
PL901	1-518-293-00	LAMP PILOT		
Q101	8-729-245-83	TRANSISTOR 2SC2458		
Q102	8-729-245-83	TRANSISTOR 2SC2458		
Q103	8-729-245-83	TRANSISTOR 2SC2458		
Q104	8-729-334-58	TRANSISTOR 2SC1345		
Q105	8-729-663-47	TRANSISTOR 2SC1364		
Q106	8-729-663-47	TRANSISTOR 2SC1364		
Q107	8-729-663-47	TRANSISTOR 2SC1364		
Q108	8-729-663-47	TRANSISTOR 2SC1364		
Q109	8-729-173-37	TRANSISTOR 2SA733-P		
Q110	8-729-100-13	TRANSISTOR 2SC2001		
Q111	8-729-663-47	TRANSISTOR 2SC1364		
Q112	8-729-600-18	TRANSISTOR 2SC663-SP8		
Q113	8-729-663-47	TRANSISTOR 2SC1364		

## ELECTRICAL PARTS

Ref. No.	Part No.	Description		
Q114	8-729-663-47	TRANSISTOR	2SC1364	
Q115	8-729-100-13	TRANSISTOR	2SC2001	
Q116	8-729-663-47	TRANSISTOR	2SC1364	
Q201	8-729-245-83	TRANSISTOR	2SC2458	
Q202	8-729-245-83	TRANSISTOR	2SC2458	
Q203	8-729-245-83	TRANSISTOR	2SC2458	
Q204	8-729-245-83	TRANSISTOR	2SC2458	
Q205	8-729-245-83	TRANSISTOR	2SC2458	
Q206	8-729-245-83	TRANSISTOR	2SC2458	
Q207	8-729-245-83	TRANSISTOR	2SC2458	
Q208	8-729-245-83	TRANSISTOR	2SC2458	
Q209	8-729-245-83	TRANSISTOR	2SC2458	
Q210	8-729-245-83	TRANSISTOR	2SC2458	
Q211	8-729-245-83	TRANSISTOR	2SC2458	
Q212	8-729-245-83	TRANSISTOR	2SC2458	
Q213	8-729-245-83	TRANSISTOR	2SC2458	
Q214	8-729-612-77	TRANSISTOR	2SA1027R	
Q215	8-729-612-77	TRANSISTOR	2SA1027R	
Q216	8-729-606-33	TRANSISTOR	2SC2603-F	
Q217	8-729-606-33	TRANSISTOR	2SC2603-F	
Q218	8-729-245-83	TRANSISTOR	2SC2458	
Q219	8-729-612-77	TRANSISTOR	2SA1027R	
Q220	8-729-245-83	TRANSISTOR	2SC2458	
Q221	8-729-612-77	TRANSISTOR	2SA1027R	
Q222	8-729-245-83	TRANSISTOR	2SC2458	
Q223	8-729-245-83	TRANSISTOR	2SC2458	
Q224	8-729-606-33	TRANSISTOR	2SC2603-F	
Q701	8-729-805-13	TRANSISTOR	2SC1475-13	
R101	1-247-823-00	CARBON	470	5%
R102	1-247-833-00	CARBON	1.2K	5%
R103	1-247-879-00	CARBON	100K	5%
R104	1-247-843-00	CARBON		3.3K
R105	1-247-821-00	CARBON		390
R106	1-247-825-00	CARBON		560
R107	1-247-823-00	CARBON		470
R108	1-247-900-00	CARBON		750K
R109	1-247-855-00	CARBON		10K
R110	1-247-826-00	CARBON		620
R111	1-247-900-00	CARBON		750K
R112	1-247-855-00	CARBON		10K
R113	1-247-822-00	CARBON		430
R114	1-247-855-00	CARBON		10K
R115	1-247-831-00	CARBON		1K
R116	1-247-865-00	CARBON		27K
R117	1-247-865-00	CARBON		27K
R118	1-247-857-00	CARBON		12K

## ELECTRICAL PARTS

Ref. No.	Part No.	Description				
R119	1-247-795-00	CARBON	33	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R121	1-247-831-00	CARBON	1K	5%	1/6W	
R122	1-247-847-00	CARBON	4.7K	5%	1/6W	
R123	1-247-871-00	CARBON	47K	5%	1/6W	
R124	1-247-844-00	CARBON	3.6K	5%	1/6W	
R125	1-247-869-00	CARBON	39K	5%	1/6W	
R126	1-247-814-00	CARBON	200	5%	1/6W	
R127	1-247-879-00	CARBON	100K	5%	1/6W	
R128	1-247-862-00	CARBON	20K	5%	1/6W	
R129	1-247-839-00	CARBON	2.2K	5%	1/6W	
R130	1-247-810-00	CARBON	130	5%	1/6W	
R131	1-247-864-00	CARBON	24K	5%	1/6W	
R132	1-247-901-00	CARBON	820K	5%	1/6W	
R133	1-247-845-00	CARBON	3.9K	5%	1/6W	
R134	1-247-863-00	CARBON	22K	5%	1/6W	
R135	1-247-833-00	CARBON	1.2K	5%	1/6W	
R136	1-247-839-00	CARBON	2.2K	5%	1/6W	
R137	1-247-863-00	CARBON	22K	5%	1/6W	
R138	1-247-863-00	CARBON	22K	5%	1/6W	
R139	1-247-851-00	CARBON	6.8K	5%	1/6W	
R140	1-247-867-00	CARBON	33K	5%	1/6W	
R141	1-247-813-00	CARBON	180	5%	1/6W	
R142	1-247-867-00	CARBON	33K	5%	1/6W	
R143	1-247-107-00	CARBON	100	5%	1/4W	
R144	1-247-831-00	CARBON	1K	5%	1/6W	
R145	1-247-815-00	CARBON	220	5%	1/6W	
R146	1-247-855-00	CARBON	10K	5%	1/6W	
R147	1-247-857-00	CARBON	12K	5%	1/6W	
R148	1-247-849-00	CARBON	5.6K	5%	1/6W	
R149	1-247-855-00	CARBON	10K	5%	1/6W	
R150	1-247-807-00	CARBON	100	5%	1/6W	
R151	1-247-101-00	CARBON	56	5%	1/4W	
R152	1-247-873-00	CARBON	56K	5%	1/6W	
R153	1-247-857-00	CARBON	12K	5%	1/6W	
R154	1-247-844-00	CARBON	3.6K	5%	1/6W	
R155	1-247-868-00	CARBON	36K	5%	1/6W	
R156	1-247-807-00	CARBON	100	5%	1/6W	
R157	1-247-866-00	CARBON	30K	5%	1/6W	
R158	1-247-876-00	CARBON	75K	5%	1/6W	
R159	1-247-831-00	CARBON	1K	5%	1/6W	
R160	1-247-863-00	CARBON	22K	5%	1/6W	
R161	1-247-855-00	CARBON	10K	5%	1/6W	
R162	1-247-783-00	CARBON	10	5%	1/6W	
R163	1-247-820-00	CARBON	360	5%	1/6W	
R164	1-247-831-00	CARBON	1K	5%	1/6W	

## CAPACITORS:

MF: $\mu$ F, PF: $\mu\mu$ F.

## RESISTORS

- All resistors are in ohms.

- #### **GOALS**

• MMH • mH • lH

- MMA : MA, OH : PH

## SEMICONDUCTORS

In each case-

In each case,  $\sigma$  :  $\mu$ , for example:  
 $UA \dots : \mu A \dots$ ,  $UPA \dots : \mu PA \dots$ ,  $UPC \dots : \mu PC \dots$ ,  
 $UPD \dots : \mu PD \dots$

UPD... : μPD...

- NOTE:**

  - The mechanical parts with no reference number in the exploded views are not supplied.
  - Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
  - Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta-\Delta\Delta-XX$  or  $\Delta-\Delta\Delta\Delta-\Delta\Delta-X$ ) may be different from those used in the set.
  - If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

ELECTRICAL PARTS

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>			
R165	1-247-829-00	CARBON	820	5%	1/6W
R166	1-247-855-00	CARBON	10K	5%	1/6W
R167	1-247-855-00	CARBON	10K	5%	1/6W
R168	1-247-895-00	CARBON	470K	5%	1/6W
R169	1-247-855-00	CARBON	10K	5%	1/6W
R170	1-247-889-00	CARBON	270K	5%	1/6W
R171	1-247-903-00	CARBON	1M	5%	1/6W
R172	1-247-871-00	CARBON	47K	5%	1/6W
R173	1-247-870-00	CARBON	43K	5%	1/6W
R174	1-247-869-00	CARBON	39K	5%	1/6W
R175	1-247-847-00	CARBON	4.7K	5%	1/6W
R176	1-247-837-00	CARBON	1.8K	5%	1/6W
R177	1-247-822-00	CARBON	430	5%	1/6W
R178	1-247-850-00	CARBON	6.2K	5%	1/6W
R179	1-247-198-00	CARBON	18	5%	1/2W
R180	1-247-875-00	CARBON	68K	5%	1/6W
R181	1-247-800-00	CARBON	51	5%	1/6W
R182	1-247-807-00	CARBON	100	5%	1/6W
R183	1-247-804-00	CARBON	75	5%	1/6W
R184	1-210-825-00	SOLID	3.3M	5%	1/4W
R185	1-247-886-00	CARBON	200K	5%	1/6W
R186	1-247-863-00	CARBON	22K	5%	1/6W
R187	1-247-873-00	CARBON	56K	5%	1/6W
R188	1-247-883-00	CARBON	150K	5%	1/6W
R189	1-247-862-00	CARBON	20K	5%	1/6W
R190	1-247-851-00	CARBON	6.8K	5%	1/6W
R191	1-247-855-00	CARBON	10K	5%	1/6W
R192	1-247-879-00	CARBON	100K	5%	1/6W
R193	1-247-863-00	CARBON	22K	5%	1/6W
R194	1-247-867-00	CARBON	33K	5%	1/6W
R195	1-247-886-00	CARBON	200K	5%	1/6W
R196	1-247-815-00	CARBON	220	5%	1/6W
R197	1-247-813-00	CARBON	180	5%	1/6W
R198	1-247-863-00	CARBON	22K	5%	1/6W
R199	1-247-855-00	CARBON	10K	5%	1/6W
R201	1-216-073-00	METAL CHIP	10K	5%	1/10W
R202	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R203	1-216-097-00	METAL CHIP	100K	5%	1/10W
R204	1-216-049-00	METAL CHIP	1K	5%	1/10W
R205	1-216-222-00	METAL CHIP	10K	5%	1/8W
R206	1-216-041-00	METAL CHIP	470	5%	1/10W
R207	1-216-089-00	METAL CHIP	47K	5%	1/10W
R208	1-216-037-00	METAL CHIP	330	5%	1/10W
R209	1-216-105-00	METAL CHIP	220K	5%	1/10W
R210	1-216-097-00	METAL CHIP	100K	5%	1/10W
R211	1-216-089-00	METAL CHIP	47K	5%	1/10W

ELECTRICAL PARTS

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>			
R212	1-216-043-00	METAL CHIP	560	5%	1/10W
R213	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R214	1-216-025-00	METAL CHIP	100	5%	1/10W
R215	1-216-121-00	METAL CHIP	1M	5%	1/10W
R216	1-216-025-00	METAL CHIP	100	5%	1/10W
R217	1-216-097-00	METAL CHIP	100K	5%	1/10W
R218	1-216-073-00	METAL CHIP	10K	5%	1/10W
R219	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R220	1-247-855-00	CARBON	10K	5%	1/6W
R221	1-216-073-00	METAL CHIP	10K	5%	1/10W
R222	1-216-089-00	METAL CHIP	47K	5%	1/10W
R223	1-216-025-00	METAL CHIP	100	5%	1/10W
R224	1-216-073-00	METAL CHIP	10K	5%	1/10W
R225	1-216-097-00	METAL CHIP	100K	5%	1/10W
R226	1-216-089-00	METAL CHIP	47K	5%	1/10W
R227	1-216-073-00	METAL CHIP	10K	5%	1/10W
R228	1-216-045-00	METAL CHIP	680	5%	1/10W
R229	1-216-073-00	METAL CHIP	10K	5%	1/10W
R230	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R231	1-216-246-00	METAL CHIP	100K	5%	1/8W
R232	1-216-222-00	METAL CHIP	10K	5%	1/8W
R233	1-247-855-00	CARBON	10K	5%	1/6W
R234	1-216-073-00	METAL CHIP	10K	5%	1/10W
R235	1-216-073-00	METAL CHIP	10K	5%	1/10W
R236	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R237	1-216-097-00	METAL CHIP	100K	5%	1/10W
R238	1-216-073-00	METAL CHIP	10K	5%	1/10W
R239	1-216-097-00	METAL CHIP	100K	5%	1/10W
R240	1-216-041-00	METAL CHIP	470	5%	1/10W
R241	1-216-109-00	METAL CHIP	330K	5%	1/10W
R242	1-216-049-00	METAL CHIP	1K	5%	1/10W
R243	1-216-037-00	METAL CHIP	330	5%	1/10W
R244	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R245	1-216-121-00	METAL CHIP	1M	5%	1/10W
R246	1-216-222-00	METAL CHIP	10K	5%	1/8W
R247	1-247-855-00	CARBON	10K	5%	1/6W
R248	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R249	1-216-049-00	METAL CHIP	1K	5%	1/10W
R250	1-216-043-00	METAL CHIP	560	5%	1/10W
R251	1-216-073-00	METAL CHIP	10K	5%	1/10W
R252	1-216-089-00	METAL CHIP	47K	5%	1/10W
R253	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R254	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R255	1-216-113-00	METAL CHIP	470K	5%	1/10W
R256	1-216-246-00	METAL CHIP	100K	5%	1/8W
R257	1-216-246-00	METAL CHIP	100K	5%	1/8W
R258	1-216-113-00	METAL CHIP	470K	5%	1/10W

## NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta-\Delta\Delta-\Delta\Delta-\Delta\Delta-X$  or  $\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-X$ ) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

## CAPACITORS:

MF: $\mu$ F, PF: $\mu\mu$ F.

## RESISTORS

- All resistors are in ohms.

• F : nonflammable

## COILS

• MMH : mH, UH :  $\mu$ H

- SEMICONDUCTORS  
 In each case, U :  $\mu$ , for example:  
 UA... :  $\mu$ A..., UPA... :  $\mu$ PA..., UPC... :  $\mu$ PC,  
 UPD... :  $\mu$ PD...

ELECTRICAL PARTSELECTRICAL PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>						
R259	1-216-097-00	METAL CHIP	100K	5%	1/10W	R305	1-216-039-00	METAL CHIP	390	5%	1/10W
R260	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R701	1-247-805-00	CARBON	82	5%	1/6W
R261	1-216-073-00	METAL CHIP	10K	5%	1/10W	R702	1-247-867-00	CARBON	33K	5%	1/6W
R262	1-216-072-00	METAL CHIP	9.1K	5%	1/10W	R401	1-247-823-00	CARBON	470	5%	1/6W
R263	1-216-075-00	METAL CHIP	12K	5%	1/10W	R703	1-247-859-00	CARBON	15K	5%	1/6W
R264	1-216-073-00	METAL CHIP	10K	5%	1/10W	R704	1-247-869-00	CARBON	39K	5%	1/6W
R265	1-216-073-00	METAL CHIP	10K	5%	1/10W	R901	1-246-545-00	RES, CARBON	1M	1%	1/4W
R266	1-216-072-00	METAL CHIP	9.1K	5%	1/10W	RM501	8-749-016-01	DM-106A			
R267	1-216-075-00	METAL CHIP	12K	5%	1/10W	RV101	1-228-100-00	RES, VAR, CARBON	20K/50K		
R268	1-216-073-00	METAL CHIP	10K	5%	1/10W	RV102	1-228-113-00	RES, VAR, CARBON	20K		
R269	1-216-167-00	METAL CHIP	51	5%	1/8W	RV103	1-226-236-00	RES, ADJ, CARBON	10K		
R270	1-216-174-00	METAL CHIP	100	5%	1/8W	RV104	1-226-240-00	RES, ADJ, CARBON	200K		
R271	1-216-045-00	METAL CHIP	680	5%	1/10W	RV901	1-228-112-00	RES, VAR, CARBON	10K		
R272	1-216-073-00	METAL CHIP	10K	5%	1/10W	S101	1-553-600-00	SWITCH, SLIDE			
R273	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	S102	1-553-086-00	SWITCH, PUSH			
R274	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	S401	1-554-509-21	SWITCH, SLIDE			
R275	1-216-097-00	METAL CHIP	100K	5%	1/10W	S402	1-552-573-00	SWITCH, SLIDE			
R276	1-216-097-00	METAL CHIP	100K	5%	1/10W	S901	1-514-346-00	SWITCH, LEAF			
R277	1-216-073-00	METAL CHIP	10K	5%	1/10W	S902	1-553-624-00	SWITCH, SLIDE			
R278	1-216-073-00	METAL CHIP	10K	5%	1/10W	SP901	1-503-013-00	SPEAKER			
R279	1-216-073-00	METAL CHIP	10K	5%	1/10W	T101	1-423-207-00	TRANSFORMER, INPUT			
R280	1-247-879-00	CARBON	100K	5%	1/6W	T102	1-433-285-11	TRANSFORMER, BIAS OSCILLATION			
R281	1-216-081-00	METAL CHIP	22K	5%	1/10W	T701	1-433-284-11	TRANSFORMER, STEP UP			
R282	1-216-073-00	METAL CHIP	10K	5%	1/10W						
R283	1-216-049-00	METAL CHIP	1K	5%	1/10W						
R284	1-216-073-00	METAL CHIP	10K	5%	1/10W						
R285	1-216-073-00	METAL CHIP	10K	5%	1/10W						
R286	1-216-033-00	METAL CHIP	220	5%	1/10W						
R288	1-216-057-00	METAL CHIP	2.2K	5%	1/10W						
R289	1-216-105-00	METAL CHIP	220K	5%	1/10W						
R290	1-216-097-00	METAL CHIP	100K	5%	1/10W						
R291	1-216-073-00	METAL CHIP	10K	5%	1/10W						
R292	1-216-198-00	METAL CHIP	1K	5%	1/8W						
R293	1-216-081-00	METAL CHIP	22K	5%	1/10W						
R294	1-216-065-00	METAL CHIP	4.7K	5%	1/10W						
R295	1-216-065-00	METAL CHIP	4.7K	5%	1/10W						
R296	1-216-097-00	METAL CHIP	100K	5%	1/10W						
R297	1-216-073-00	METAL CHIP	10K	5%	1/10W						
R298	1-216-055-00	METAL CHIP	1.8K	5%	1/10W						
R299	1-216-246-00	METAL CHIP	100K	5%	1/8W						
R300	1-216-079-00	METAL CHIP	18K	5%	1/10W						
R301	1-216-081-00	METAL CHIP	22K	5%	1/10W						
R302	1-216-083-00	METAL CHIP	27K	5%	1/10W						
R303	1-216-072-00	METAL CHIP	9.1K	5%	1/10W						
R304	1-216-295-00	METAL CHIP	0	5%	1/10W						

## NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta-\Delta\Delta-XX$  or  $\Delta-\Delta\Delta\Delta-\Delta\Delta-X$ ) may be different from those used in the set.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

## CAPACITORS:

MF: $\mu$ F, PF: $\mu\mu$ F.

## RESISTORS

All resistors are in ohms.

F : nonflammable

## COILS

MMH : mH, UH :  $\mu$ H

## SEMICONDUCTORS

In each case, U :  $\mu$ , for example:  
UA... :  $\mu$ A..., UPA... :  $\mu$ PA..., UPC... :  $\mu$ PC,  
UPD... :  $\mu$ PD...

# TCM-5000EV

# **SONY® SERVICE MANUAL**

*US Model*  
*Canadian Model*  
*AEP Model*  
*UK Model*  
*E Model*

## **SUPPLEMENT-1**

File this supplement with the service manual.

**Subject:**

- Change of IC102 (AUDIO BOARD)  
TA7207P (FORMER) → BA527 (NEW)
- Correction and changed parts.

(ECN-MT500026/MT500051)

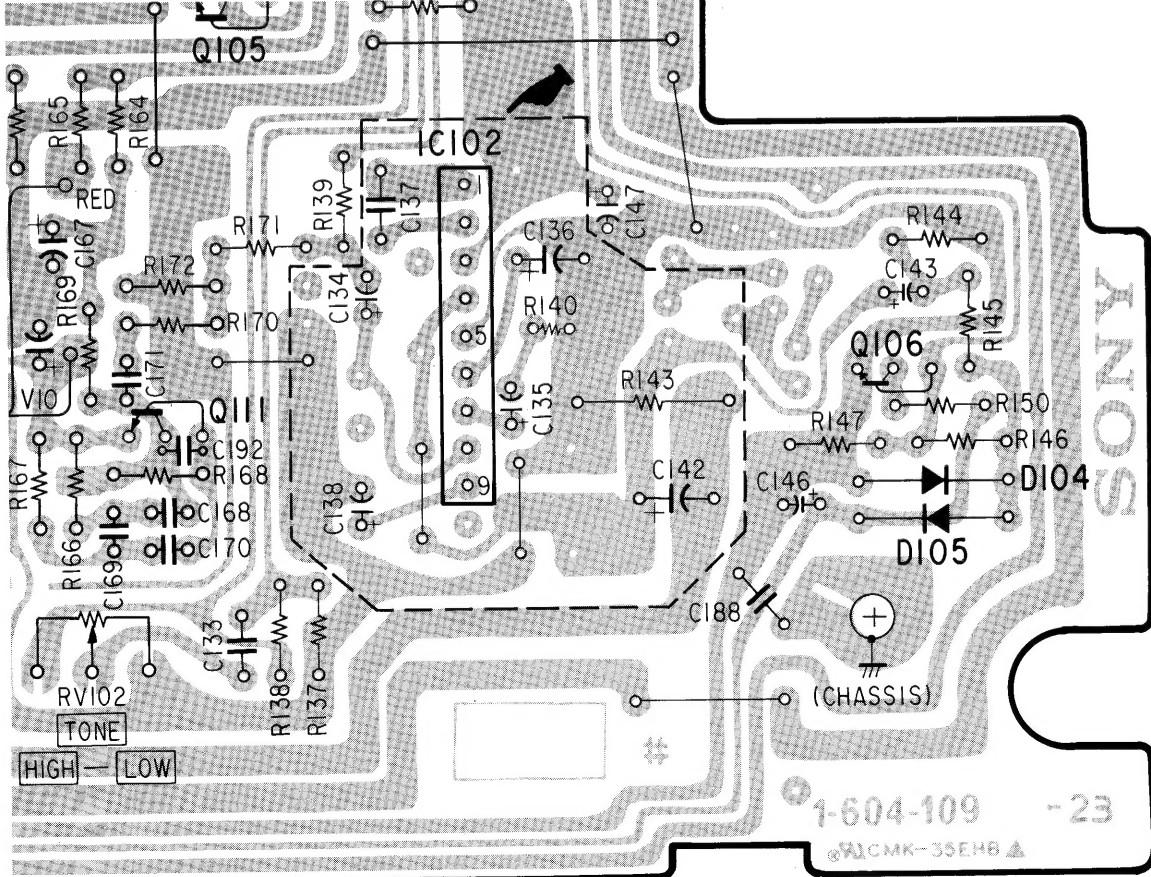
**• PRINTED WIRING BOARD  
[AUDIO BOARD]**

 : changed portion

Page 21, 22

Location: G-

1 2 3 4

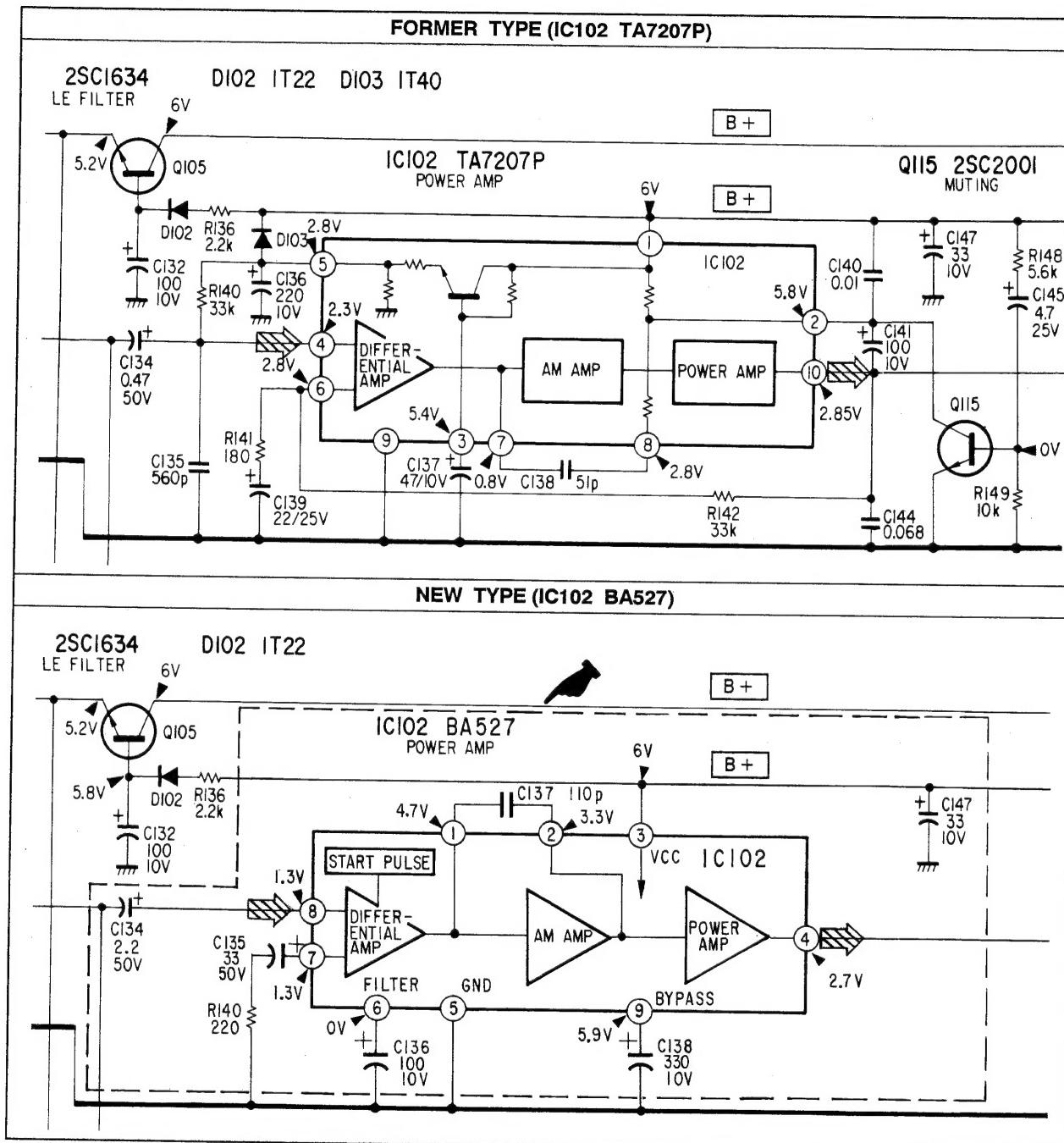


• SCHEMATIC DIAGRAMS  
[AUDIO BOARD]

 : changed portion

Page 24, 25

Location: A-C, 16-19



: changed portion

: corrected portion

Page	INCORRECT or FORMER TYPE	CORRECT or NEW TYPE
23	<p>Location: C-D, 6-7</p>	
23	<p>Location: G-H, 6-7</p>	
24	<p>Location: A-B, 11-12</p> <p>Q103,104 2SC900 EQ AMP</p>	<p>Q103,104 2SC900 EQ AMP</p>

## ● PARTS LIST

Page	Ref. No.	FORMER TYPE					NEW TYPE				
		Part No.	Description				Part No.	Description			
33	C127	1-102-074-00 CERAMIC	0.001 $\mu$ F	10%	50V		1-161-051-00 CERAMIC	0.01 $\mu$ F	10%	50V	
	C134	1-123-351-00 ELECT	0.47 $\mu$ F	20%	50V		1-124-925-11 ELECT	2.2 $\mu$ F	20%	100V	
	C135	1-102-115-00 CERAMIC	560PF	10%	50V		1-126-966-11 ELECT	33 $\mu$ F	20%	50V	
	C136	1-123-308-00 ELECT	220 $\mu$ F	20%	10V		1-126-933-11 ELECT	100 $\mu$ F	20%	10V	
34	C137	1-123-306-00 ELECT	47 $\mu$ F	20%	10V		1-102-815-00 CERAMIC	110PF	5%	50V	
	C138	1-101-882-00 CERAMIC	51PF	5%	50V		1-126-924-11 ELECT	330 $\mu$ F	20%	10V	
	C139	1-123-330-00 ELECT	22 $\mu$ F	20%	25V		DELETE				
	C140	1-108-239-00 MYLAR	0.01 $\mu$ F	10%	50V		DELETE				
	C141	1-123-307-00 ELECT	100 $\mu$ F	20%	10V		DELETE				
	C144	1-108-249-00 MYLAR	0.068 $\mu$ F	10%	50V		DELETE				
	C145	1-123-328-00 ELECT	4.7 $\mu$ F	20%	25V		DELETE				
35	D103	8-719-815-55 DIODE	1S1555				DELETE				
	IC102	8-759-272-07 IC	TA7207P				8-759-952-70 IC	BA527			
	Q115	8-729-100-13 TRANSISTOR	2SC2001				DELETE				
36	R140	1-247-867-00 CARBON	33K	5%	1/6W		1-247-815-91 CARBON	220	5%	1/4W	
	R141	1-247-813-00 CARBON	180	5%	1/6W		DELETE				
	R142	1-247-867-00 CARBON	33K	5%	1/6W		DELETE				
	R148	1-247-849-00 CARBON	5.6K	5%	1/6W		DELETE				
	R149	1-247-855-00 CARBON	10K	5%	1/6W		DELETE				
	R154	1-247-844-00 CARBON	3.6K	5%	1/6W		1-249-425-11 CARBON	4.7K	5%	1/4W	
—	R401	—————	—————	—————	—————		1-249-413-11 CARBON	470	5%	1/4W	

Sony Corporation  
 Consumer A&V Products Company  
 Personal A&V Products Div.

Published by Home A&V Products Div.  
 Quality Engineering Dept.

English  
 95D05111-1  
 Printed in Japan  
 © 1995. 4